ORDER NO. TSD-7608-592

Service Manual

FM/AM/FM STEREO RADIO WITH 8-TRACK PLAYER/RECORDER, CASSETTE PLAYER/ RECORDER AND RECORD CHANGER

Compact Stereo

SE-4007

Specifications

AMPLIFIER SECTION

Frequency Response	25 Hz ~ 30 kHz, −3 dB
REC OUT	150 mV
Tone Controls:	
Bass	±10 dB at 100 Hz
Treble	±10 dB at 10 kHz
Loudness	+8 dB at 100 Hz
	+3 dB at 10 kHz

FM TUNER SECTION

Frequency Range	87.5 ~ 108 MHz
Intermediate Frequency	10.7 MHz
Sensitivity	4 μV (S/N 30 dB, MOD 30%)
Harmonic Distortion	0.5%
Signal to Noise Ratio	65 dB (at 1 kHz, 60 dB, 100%)
Stereo Separation	35 dB (at 1 kHz, 60 dB, 30%)
Antenna	300 ohm Balanced

AM TUNER SECTION

Frequency Range	525 ~ 1605 kHz
Intermediate Frequency	455 kHz
Sensitivity	100 μV/m for 50mW
Antenna	Built-in Ferrite Bar Antenna

RECORD PLAYER SECTION

Type	Automatic Record Changer
Turntable	28 cm (11″)
Turntable Speed	33-1/3, 45 and 78 RPM, 3-speed
Phonomotor	4-Pole Induction
Cartridge	Moving Magnet, EPC-82SMBD
Stylus	Diamond, EPC-31STSD
Stylus Pressure	4 ~ 5 g

SPEAKER SECTION

Type	2-Way, Air Suspension
	20 cm (8″), 5 cm(2″)
Impedance	8 ohm

CASSETTE TAPE PLAYER/RECORDER SECTION

Playing System	Auto-Stop Cassette
Track System	4-Track, 2-Channel
Recording System	AC Bias, 52 kHz
Erasing System	AC Erase, 52 kHz
Tape Speed	4.75 cm/sec. (1-7/8 i.p.s.)
Frequency Response	70 Hz ~ 10 kHz (Normal)
	70 Hz ~ 12 kHz (CrO_2)
Wow and Flutter	0.2% (WRMS)

8-TRACK TAPE PLAYER/RECORDER SECTION

Playing System	8-Track, Auto Eject
Track System	8-Track, 2-Channel
Recording System	AC Bias, 47 kHz
Erasing System	AC Erase, 47 kHz
Tape Speed	9.5 cm/sec. (3-3/4 i.p.s.)
Frequency Response	40 Hz ~ 12 kHz
Wow and Flutter	0.2% (WRMS)

POWER SUPPLY

For Far-East Area	AC 100 ~ 115V (115 ~ 130V, 200 ~ 225V, 225 ~ 250V), 50/60 Hz
For Europe	AC 100 ~ 115V, 115 ~ 130V, 200 ~ 225V, 225 ~ 250V, 50/60 Hz

POWER CONSUMPTION

For Far East Area	85W
For Europe	100W

DIMENSIONS (W × H × D)

Center Unit	553 mm × 286.5 mm × 424 mm
	(21-25/32″) × (11-9/32″) × (16-11/16″)
Speaker Unit	290 mm × 494 mm × 217 mm
	(11-13/32″) × (19-7/16″) × (8-17/32″)

WEIGHT

Center Unit	18 kg (39 lb. 11 oz)
Speaker System	5.5 kg (12 lb. 2 oz) each

* Specifications are subject to change without notice for further improvement.

Panasonic®

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DISASSEMBLY INSTRUCTIONS

■ **To Remove Record Changer**
(Refer to Figs. 1, 2-a, ~ 2-e and 4)

1. Remove six (6) rear board mounting screws Nos. (1) ~ (6) as shown in Fig. 4.
2. Loosen the changer transit screws (A and B) by turning them fully clockwise.
3. Turn retaining clip of changer transit screws, as shown in Fig. 1.
4. Lift record changer slightly in back, unplug two pin plugs from changer socket and molex plug from molex connector. And remove changer by lifting it slightly back and sliding it toward rear of cabinet. (Refer to Fig. 2)
5. To reassemble, reverse above procedure.

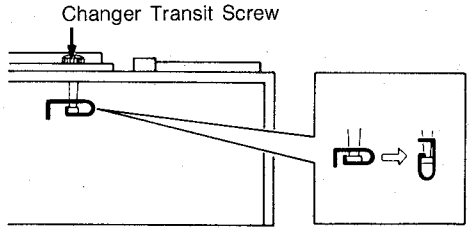


FIG. 1

■ **To Replace Components**

1. Remove record changer. (Refer to above instructions.)
2. Remove four (4) cabinet mounting screws Nos. (7) ~ (10) and two (2) cassette panel mounting screws Nos. (11) ~ (12), as shown in Fig. 4.
3. Remove cabinet by sliding it toward rear.
4. Remove five (5) bottom board mounting screws Nos. (13) ~ (17). as shown in Fig. 4.
   To reassemble, reverse above procedure.

■ **To Remove Escutcheon from Chessis**

1. Refer to instructions of record changer removal.
2. Remove seven (7) knobs from front panel.
3. Remove five (5) escutcheon mounting screws Nos. (18) ~ (22), as shown in Fig. 4.
4. To reassemble, reverse above procedure.

Remarks:
When removing cabinet from chassis, be careful not to break the AM antenna lead wires.

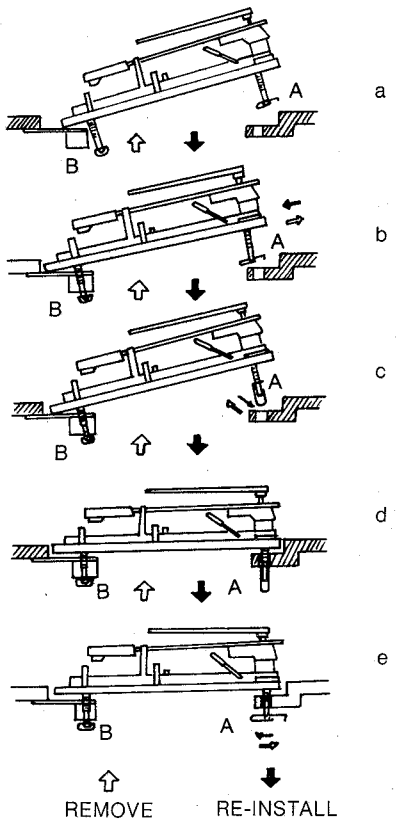


FIG. 2-a ~ e

■ **To Remove Cassette Player/Recorder**

1. Remove record changer and cabinet.
2. Remove seven (7) cassette player/recorder mounting screws Nos. (24) ~ (30), as shown in Fig. 4.
3. To reassemble, reverse above procedure.

■ **To Remove 8-Track Player/Recorder**

1. Remove cassette player/recorder.
2. Remove four (4) 8-track player/recorder mounting screws Nos. (32) ~ (35), as shown in Fig. 4.
3. Unplug 3P and 5P connectors from chassis.
4. To reassemble, reverse above procedure.

■ **To Remove Remote Wire Assembly**
Lift remote wire assembly upward by pushing the lower portion of plastic hook with a suitable screwdriver, as shown in Fig. 3-a.

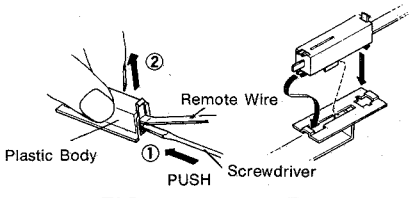


FIG. 3-a FIG. 3-b

■ **To Install Remote Wire Assembly**
Put the front portion of remote wire assembly into the mounting board while inclining the plastic body and push the top portion of body, as shown in Fig. 3-b.

■ **Note for Treatment of Remote Wire Assembly**
When servicing remote wire assembly, be sure to hold gently, and do not bend a part of it tightly, as shown in Fig. 3-c.
Before lifting the 8-track player/recorder (or circuit board), be sure to remove remote wire assembly carefully to prevent it from being damaged.

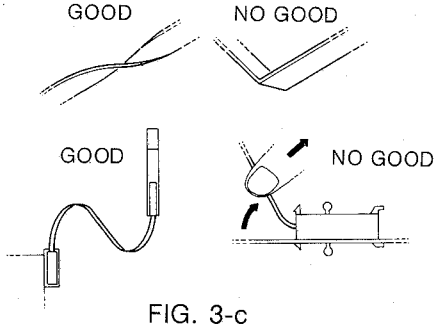


FIG. 3-c

LOCATION OF PARTS

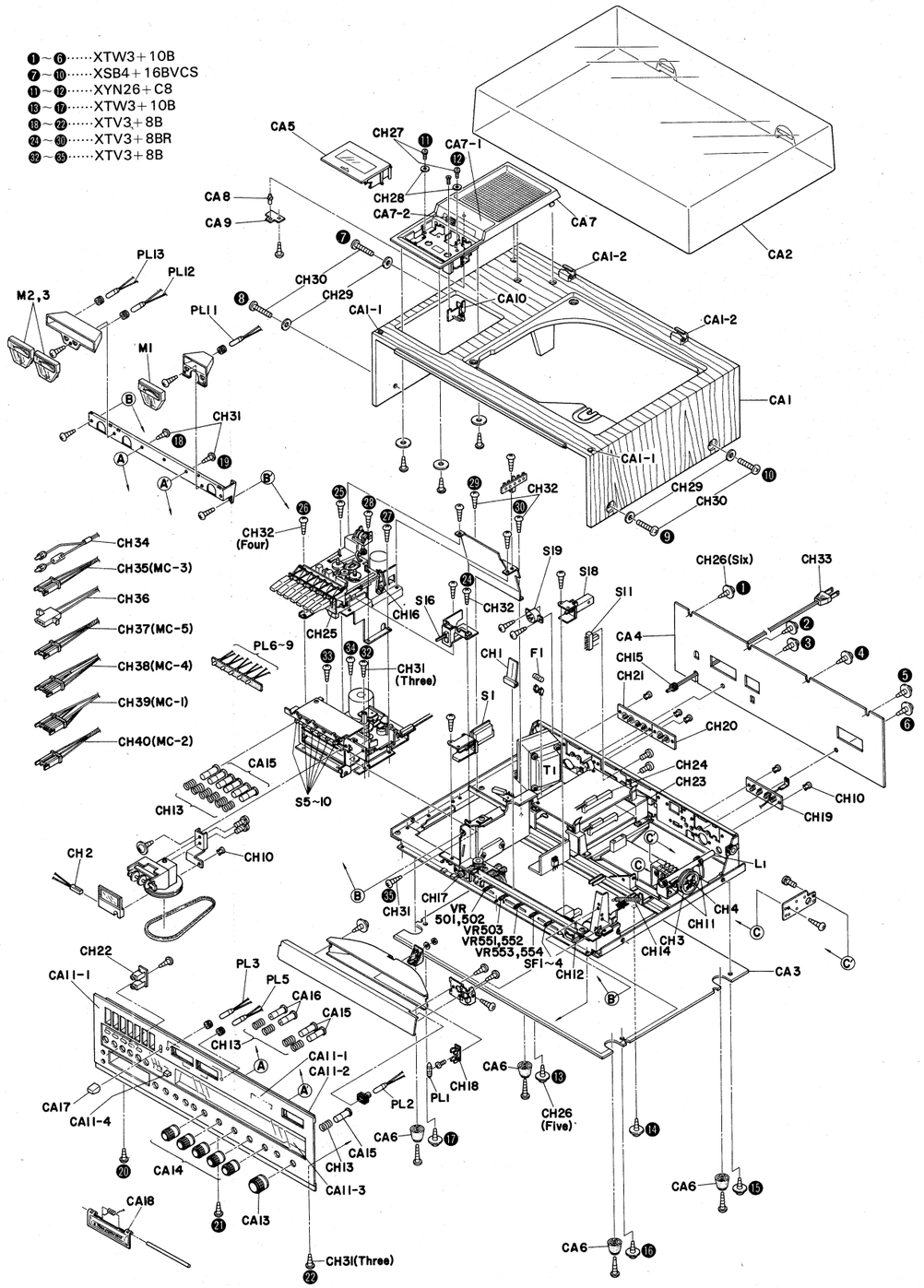


FIG. 4

EXPLODED VIEW OF 8-TRACK PLAYER/RECORDER

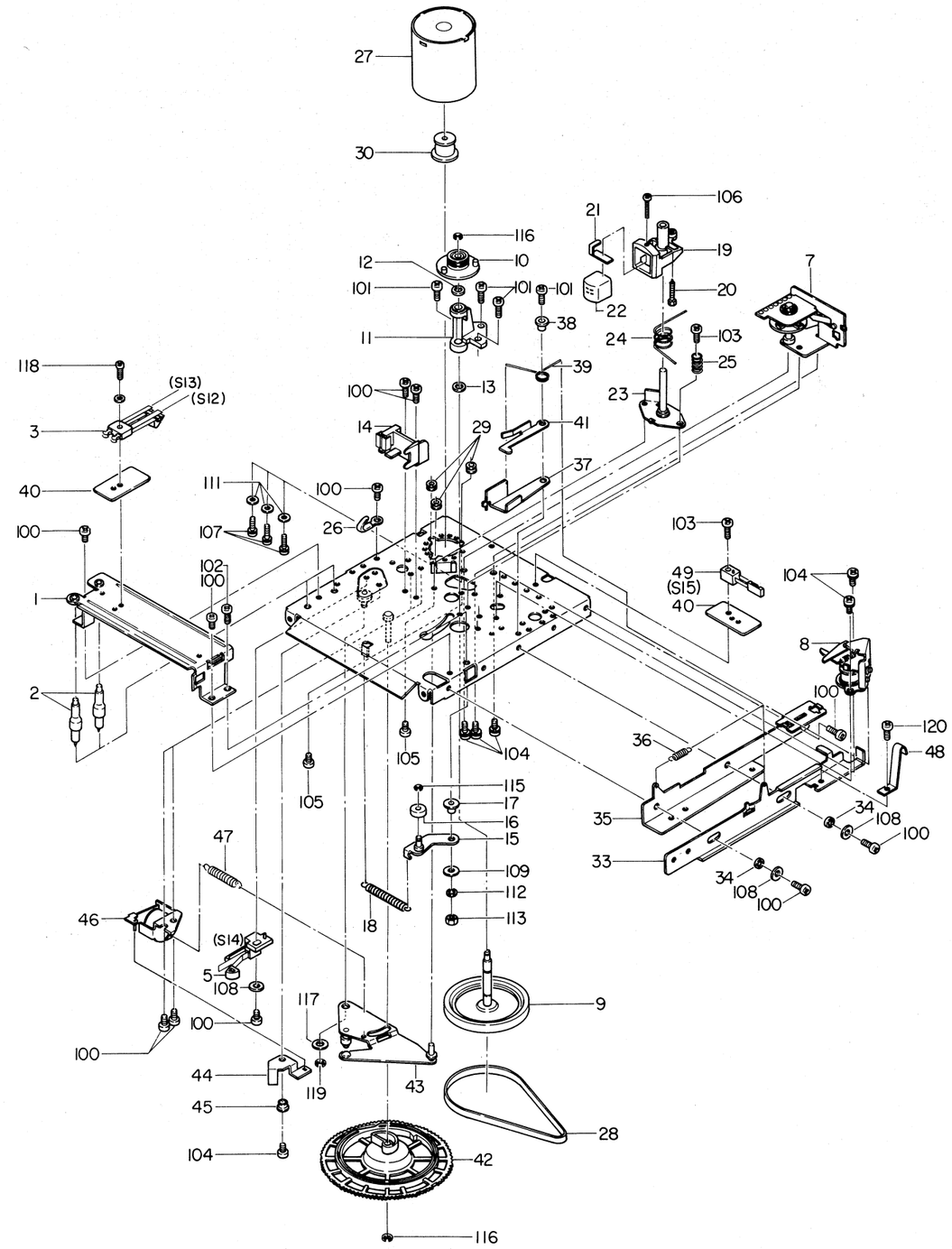
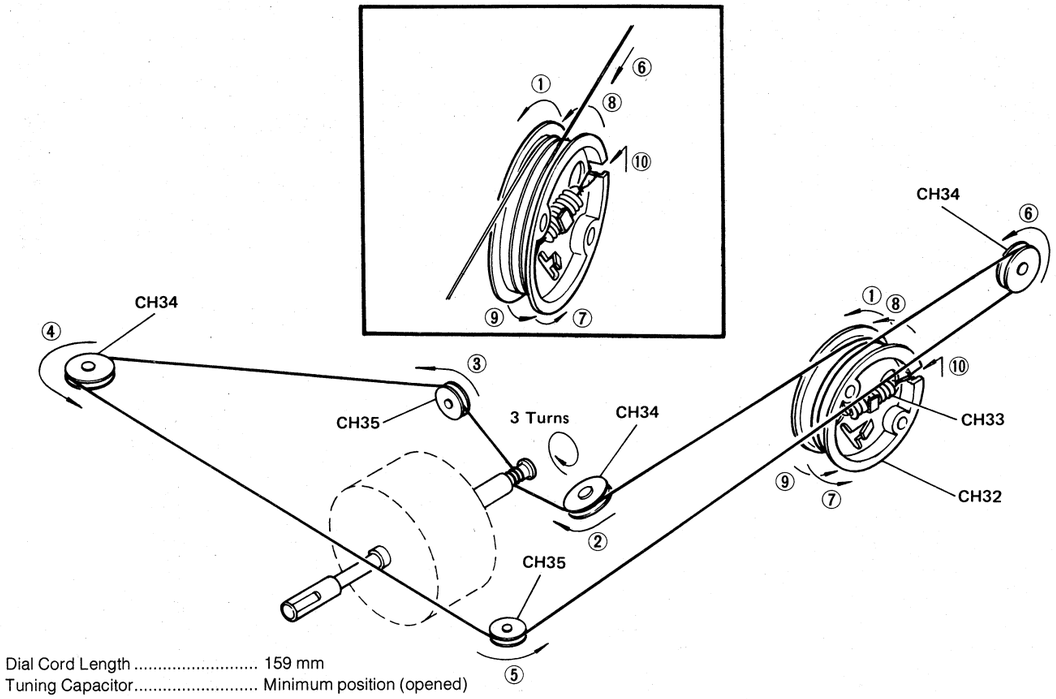


FIG. 5

DIAL CORD STRINGING GUIDE



Dial Cord Length ..... 159 mm
Tuning Capacitor..... Minimum position (opened)

FIG. 6

ALIGNMENT INSTRUCTIONS (RADIO)—1

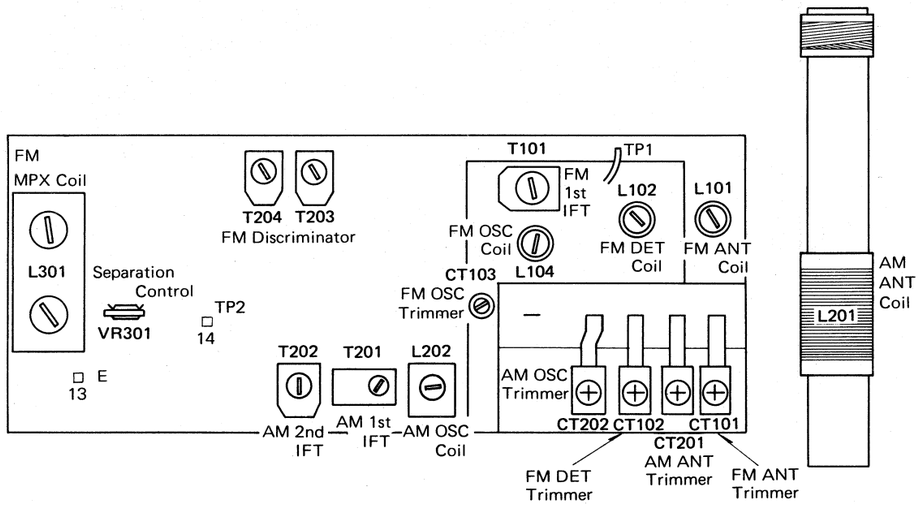


FIG. 7 ALIGNMENT POINTS

ALIGNMENT INSTRUCTIONS (RADIO)—2

Notes:
1. Volume Control ..... Maximum (AM-IF and RF, FM-RF); Minimum (FM-IF)
2. Treble Control ..... Center
3. Bass Control..... Center
4. Balance Control..... Center
5. Function Selector ..... AM, FM, FM STEREO
6. Power Switch ..... ON
7. Output of signal generator should be no higher than necessary to obtain output reading.
8. Make certain that speaker system is connected to the tuner when aligning.

STEP	SIGNAL GENERATOR OR SWEEP GENERATOR		RADIO DIAL SETTING	INDICATOR (VTVM or SCOPE)	ADJUST	REMARKS
	CONNECTION	FREQUENCY				
	AM-IF AND RF ALIGNMENT					
1	Fashion loop of several turns of wire and radiate signal into loop of receiver.	455 kHz 30% Mod. with 400 Hz	Point of non-interference (on/ about 600 kHz)	Output meter across speaker jack (L) (Imp. 8Ω)	T202 (2nd I.F.T.)	Adjust for maximum output.
2	Fashion loop of several turns of wire and radiate signal into loop of receiver.	550 kHz 30% Mod. with 400 Hz	550 kHz (5.8 mm)	Output meter across speaker jack (L) (Imp. 8Ω)	L201 (ANT Coil) L202 (OSC Coil)	Adjust for maximum output by sliding coil (L201) along ferrite core.
3	Fashion loop of several turns of wire and radiate signal into loop of receiver.	1500 kHz 30% Mod. with 400 Hz	1500 kHz (154.8 mm)	Output meter across speaker jack (L) (Imp. 8Ω)	CT201 (ANT Trimmer) CT202 (OSC Trimmer)	Adjust for maximum output. Repeat steps (2) and (3).
	*** Cement antenna bobbin with wax after completing alignment. T201 is pre-aligned. Do not touch it.**					
	FM-IF AND DETECTOR ALIGNMENT					
1	High side through 0.001 mfd to point TP1. Common to chassis.	10.7 MHz (400 kHz SWP.)	Point of non-interference (on/ about 98 MHz)	Connect vert, amp. input of scope to point TP2. Common to chassis.	T101 (FM 1st I.F.T.) T203 (FM Disc. I.F.T.)	Adjust for maximum amplitude and symmetrical curve (Refer to Fig. 8-a)
2	High side through 0.001 mfd to point TP1. Common to chassis.	10.7 MHz (400 kHz SWP.)	Point of non-interference (on/ about 98 MHz)	Connect vert. amp. input of scope to point TP2. Common to chassis.	T204 (FM Disc. I.F.T.)	Adjust for maximum amplitude and proper linearity between ±100 kHz markers. (Refer to Fig. 8-b)
	*** Before aligning step 1, turn the core of T204 fully counterclockwise.**					
	FM-RF ALIGNMENT					
1	Connect to EXT. FM antenna terminal through Dummy antenna. Common to chassis. (Refer to Fig.9)	90 MHz 30% Mod. with 400 Hz	90 MHz (22.5 mm)	Output meter across speaker jack (L). (Imp. 8Ω)	L104 (FM OSC Coil) L101 (FM ANT Coil) L102 (FM DET Coil)	Adjust for maximum output.
2	Connect to EXT. FM antenna terminal through Dummy antenna. Common to chassis. (Refer Fig. 9)	106 MHz 30% Mod. with 400 Hz	106 MHz (151 mm)	Output meter across speaker jack (L) (Imp. 8Ω)	CT103 (FM OSC Trimmer) CT101 (FM ANT Trimmer) CT102 (FM DET Trimmer)	Adjust for maximum output. Repeat steps (1) and (2).
	*** As three output readings will be present, adjustments must be made at center frequency.**					

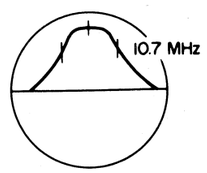


FIG. 8-a

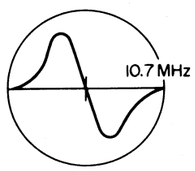


FIG. 8-b

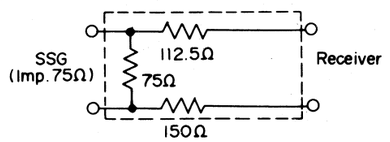
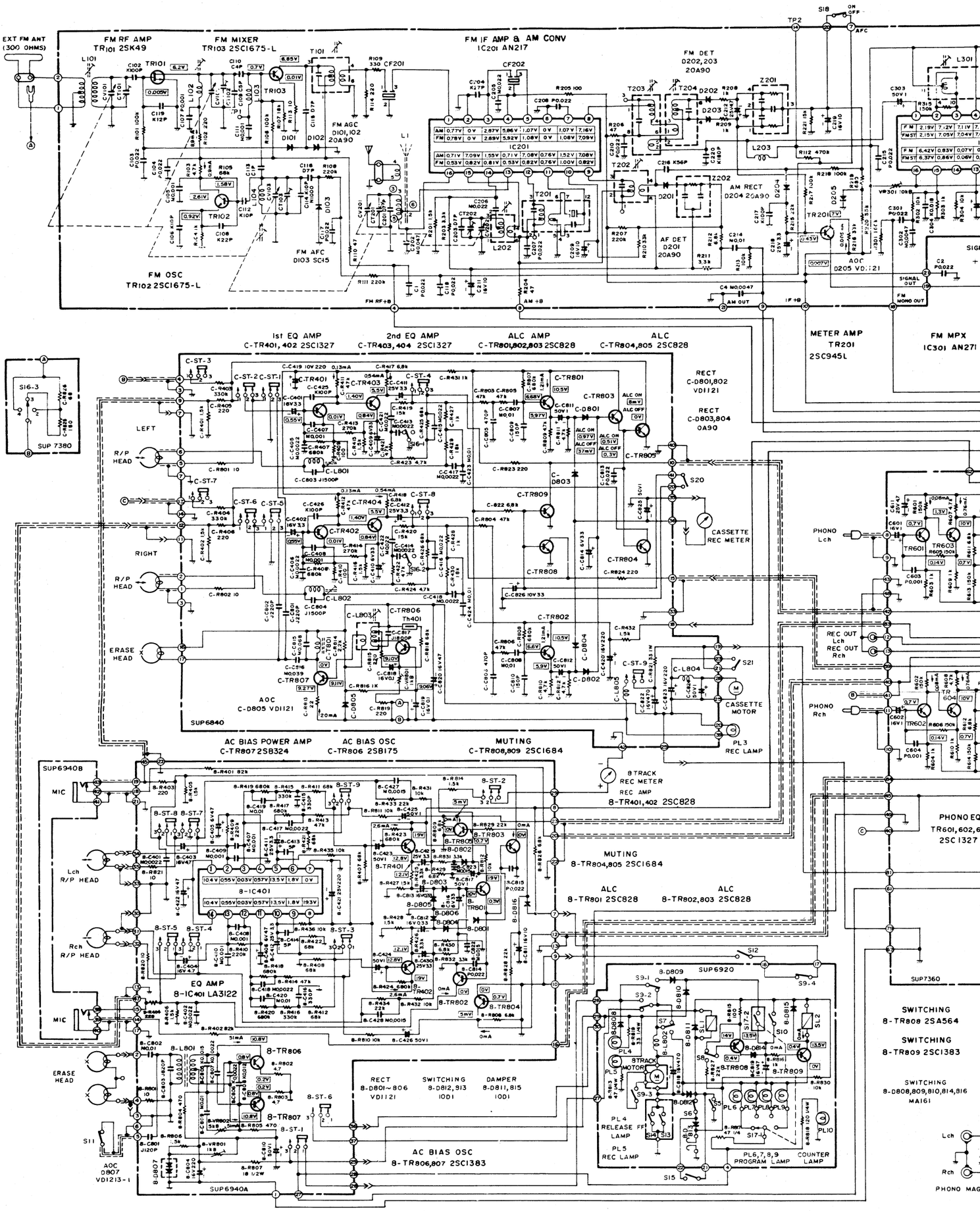


FIG. 9 DUMMY ANTENNA

SCHEMATIC DIAGRAM OF MOD



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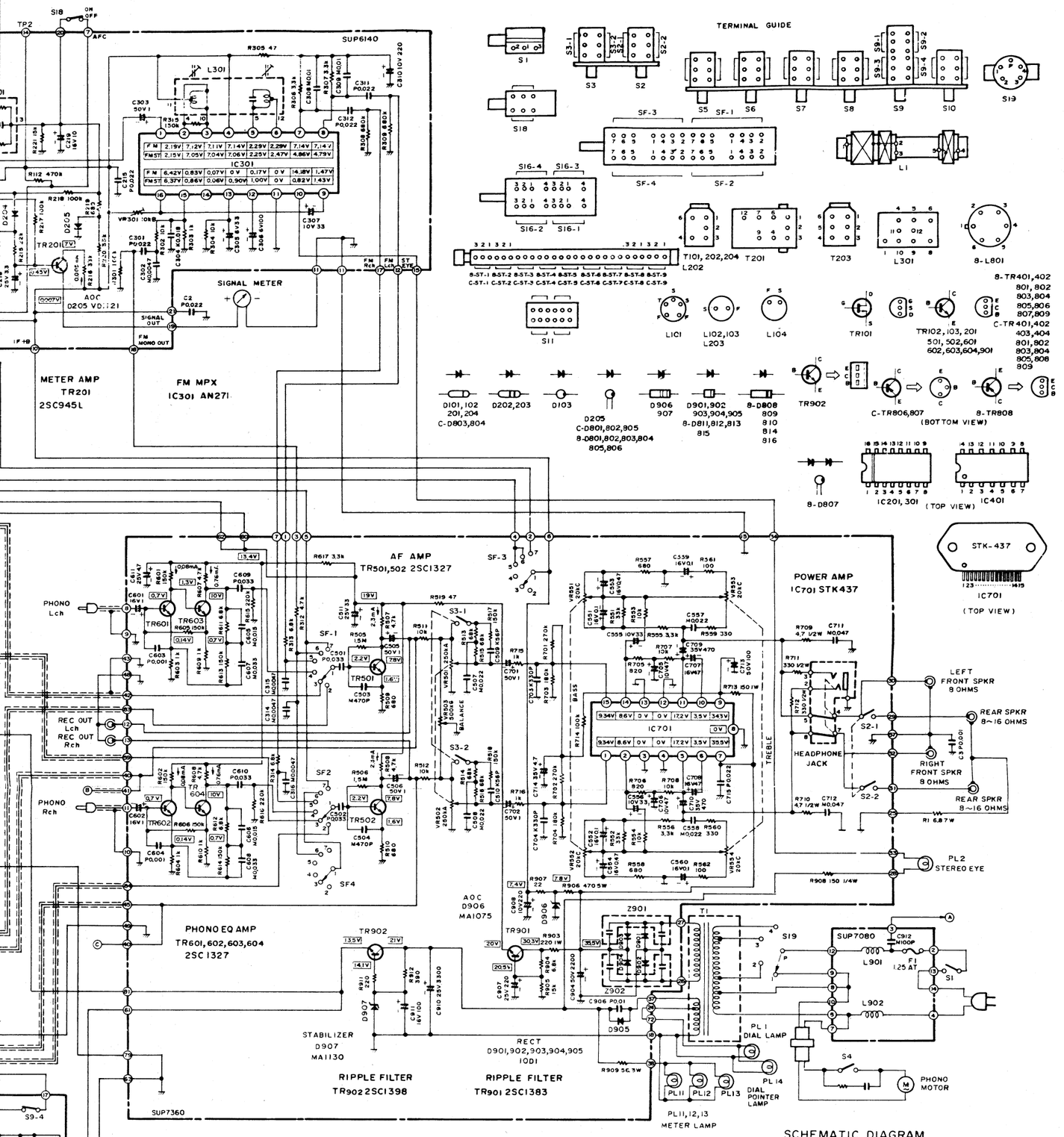
AGRAM OF MODEL SE-4007



SCHEMATIC DIAGRAM
MODEL NO, SE-4007

NOTES

1)
- S1 : POWER SWITCH in "OFF" position
- S2 : Q'PLEX SWITCH in "STEREO" position
- S3 : LOUDNESS SWITCH in "OFF" position
- S4 : PHONO MOTOR SWITCH in "OFF" position
- S5 : PROGRAM SELECTOR SWITCH in "OFF" position
- S6 : REPEAT SWITCH in "OFF" position
- S7 : PAUSE SWITCH in "OFF" position
- S8 : AUTO EJECT SWITCH in "OFF" position
- S9 : FF SWITCH in "OFF" position
- S10 : EJECT SWITCH in "OFF" position
- S11 : WHISTLE DEFEAT SWITCH in "A" position
- S12 : 8-TRACK MUTING SWITCH in "OFF" position
- S13 : 8-TRACK MOTOR SWITCH in "OFF" position
- S14 : 8-TRACK MOTOR SWITCH in "OFF" position
- S15 : REPEAT DEFEAT SWITCH in "OFF" position
- S16 : CASSETTE TAPE SELECTOR SWITCH in "NORMAL" position
- S17 : 8-TRACK PROGRAM INDICATOR SWITCH in "PROGRAM 1" position
- S18 : AFC SWITCH in "OFF" position
- S19 : POWER VOLTAGE SELECTOR SWITCH in "110V" position
- S20 : CASSETTE MUTING SWITCH in "ON" position
- S21 : CASSETTE MOTOR SWITCH in "OFF" position
- ST : 8-TRACK & CASSETTE REC/PLAY SWITCH in "PLAY" position
- SF : FUNCTION SELECTOR SWITCH in "CASSETTE / MIC" position (1. COMMON 2. 8-TRACK/MIC 3. CASSETTE/MIC 4. PHONO 5. FM STEREO 6. FM 7. AM)

2) LETTERS J, K, M and P indicate tolerance of capacitors as follows: J=±5% K=±10% M=±20% P=$^{+100\%}_{-0\%}$

3) DC Voltages are to be measured with VTVM under no signal condition in "AM," "FM" or "FM STEREO" position and also in RECORDING MODE

ALIGNMENT INSTRUCTIONS (RADIO)—3

■ **FM Stereo Alignment**

Notes:

1. Stereo Modulator: Connect Sterec Modulator to EXT. Mod. terminal of signal generator
2. Signal Generator:
   - Modulation Rate of 19 kHz Pilot Signal 10%
   - Output Level..... 30 dB
   - Frequency..... Approx. 98 MHz
3. Tuner:
   - Volume Control ..... Audible level of speaker sound
   - Treble Control ..... MIN
   - Bass Control..... Center
   - Band Selector ..... FM STEREO
   - Balance Control..... Center

SEPARATION ALIGNMENT

Notes:

1. Signal Generator:
   - Modulation Rate of 19 kHz Pilot Signal 10%
   - Modulation Rate of Right and Left Signal 27%
   - Output Level..... 60 dB
2. Tuner (Balance Control): Adjust balance control so that output level from both channels becomes equal.

EQUIPMENT CONNECTION			ADJUST	REMARKS
SIGNAL GENERATOR	VTVM	OSCILLOSCOPE		
Connect to EXT. FM antenna terminal through dummy antenna. (Refer to Fig. 9)	Connect across speaker jack. (Imp. 8Ω)	Connect vertical amp. input of scope to terminals of VTVM.	VR301 (Separation Control)	Adjust VR301 for minimum indication on VTVM from the left side output when the right side of stereo modulator is modulated. Adjust VR301 in the same way for the right side. Adjust for best balance between "L to R" and "R to L" separation.

*** L301 is pre-aligned. Do not touch it.**

ALIGNMENT INSTRUCTIONS (8-TRACK PLAYER/RECORDER)

Notes:

1. Insert cartridge and set REC button to ON.
2. Do not touch R/P Head when adjusting.

STEP	CIRCUIT	VTVM CONNECTION	REC LEVEL	ADJUST	REMARKS
1	AC Bias Circuit	DC Connect positive side to TP14 and negative side to TP13. (Refer to Fig. 10)	Auto REC Level Control	VR801 (Current Control)	Adjust VR801 for $1.8\ ^{+0.2}_{-0.4}$V of VTVM reading.
2	AC Bias Circuit	Connect AC probe to TP12 and Common probe to TP11	Auto REC Level Control	VR802 (Erase Voltage Adjust)	Adjust VR801 for 78 ± 2 mV of VTVM reading at A position and 82 ± 4 mV of VTVM reading at B position of Whistle Defeat Switch.

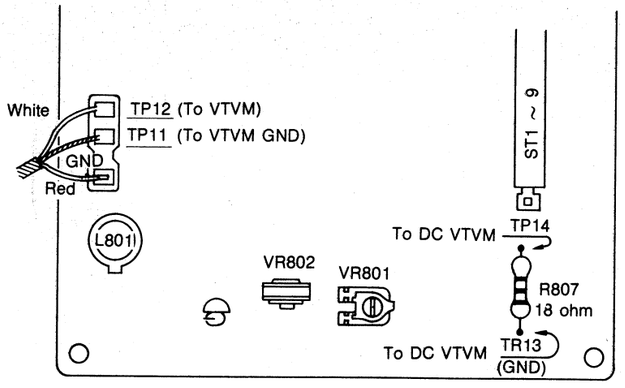


FIG. 10

ALIGNMENT INSTRUCTIONS (8-TRACK PLAYER/RECORDER)

* After removing or replacing head, the following adjustments must be made.

COARSE ADJUSTMENT

1. Adjust screw-1 with a gauge until the head is positioned perpendicularly to chassis by visual check, as shown in Figs. 11 and 12.
2. Make sure that head is positioned parallel to chassis by adjusting screw-2, as shown in Figs. 11 and 13.
3. Set program button to 1st channel position. Adjust screw-3 until upper gap is parallel to the upper part of tape guide by visual check, as shown in Fig. 14.

FINE ADJUSTMENT

1. Azimuth Adjustment
   With the azimuth test tape, adjust for maximum output by using screw-2.
2. Height Adjustment
   With the height adjustment tape, adjust screw-3 for minimum cross-talk.

Note:
The adjustments should be made in the above order.
Paint lock adjusting screws 1, 2 and 3 after alignment.

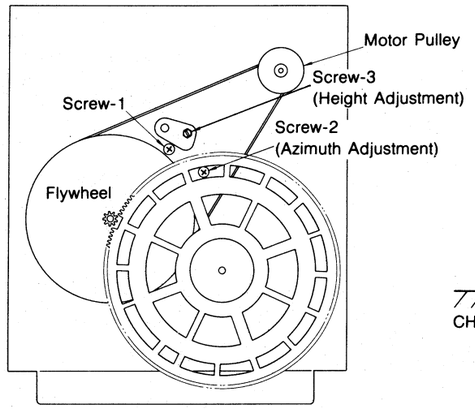


FIG. 11

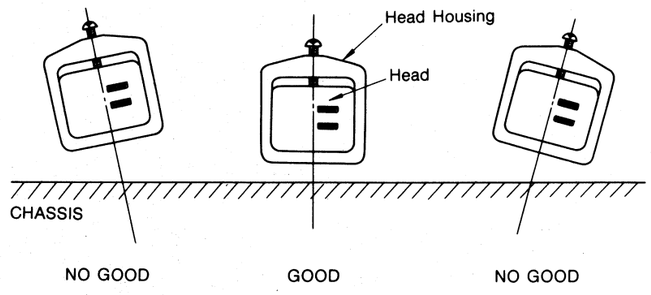


FIG. 13

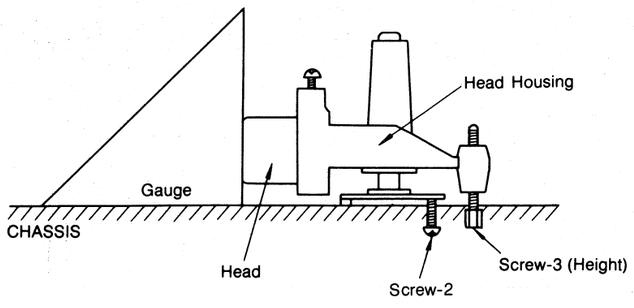


FIG. 12

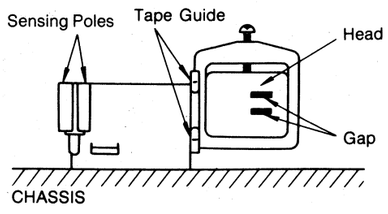


FIG. 14

ALIGNMENT INSTRUCTIONS (CASSETTE PLAYER/RECORDER)

PRESSURE ROLLER ADJUSTMENT

1. Switch set to PLAY. (Do not insert cassette.)
2. Hook Spring gauge to arm of pressure roller, as shown in Fig. 15.
3. Pull pressure roller away from the capstan in the direction of arrow 1 with spring gauge and slowly permit the pressure roller to return forward capstan in the direction of arrow 2.
4. Measure tension at time when pressure roller makes contact with capstan (or when pressure roller start rotating).
5. The standard tension of pressure roller should be 250 ~ 380g.
6. If pressure is not within these limits;
   Clean the rubber roller and capstan with a soft cloth moistened with alcohol or replace pressure spring.

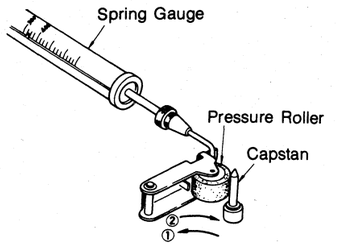


FIG. 15

TAKE-UP TORQUE ADJUSTMENT

* Test Tape: SRK-CT (Take-up Torque Meter)

1. Insert test tape.
2. Rewind the tape to its starting point.
3. Switch set to PLAY.
4. Read "▶" mark of indicator on take-up side, as shown in Fig. 16.
5. Repeat PLAY-STOP several times and read the average tension.
6. The standard take-up tension should be 30 ~ 70 g.cm.
   If take-up tension is not within these limits;
   a) Clean main belt, take-up reel and all parts which contact them with a cotton swab moistened with alcohol, and/or
   b) Switch set to "OFF", remove main belt and make sure that take-up reel and take-up clutch are rotating smoothly.
   c) Change take-up clutch tension by turning the friction spring under reel table, as shown in Fig. 17, and/or
   d) Replace take-up clutch.

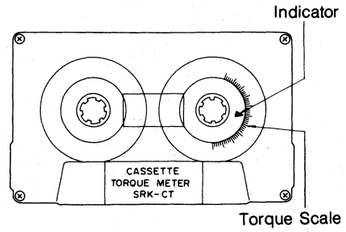


FIG. 16

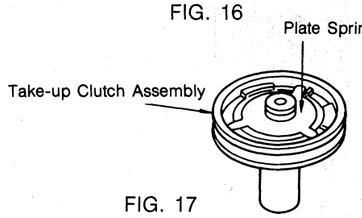


FIG. 17

Control Setting and Procedure:	1. Function Selector ..... CASSETTE 2. Balance Control..... Center 3. Depress push buttons PLAY and REC at the same time. (Be sure to release the record safety lever manually.) 4. Tape Selector..... CrO_2				
STEP	CIRCUITS	VTVM CONNECTION	VOLUME CONTROL	ADJUSTMENT	REMARKS
1	AC BIAS OSCILLATOR and ERASE	Connect positive side to pin No. 17 (+) and negative side to pin No. 16 (−). (Refer to Fig. 18)	MIN.	L803, VR801 Erase Bias Adjust	Adjust L803 for maximum output. Adjust VR801 for 8.5 ± 0.2 mV reading on VTVM-1.
2	AC BIAS OSCILLATOR and ERASE	Connect positive side to pin No. 5 and negative side to pin No. 3. (Refer to Fig. 18)	MIN.	L801 REC Bias Adjust	Adjust L801 for 4.2 ± 0.2 mV reading on VTVM-1.
3	AC BIAS OSCILLATOR and ERASE	Connect positive side to pin No. 1 and negative side to pin No. 3. (Refer to Fig. 18)	MIN.	L802 REC Bias Adjust	Adjust L802 for 4.2 ± 0.2 mV reading on VTVM-2. Repeat steps (2) and (3).
Notes:	1. Do not touch R/P Head and Erase Head when adjusting. 2. As two points are obtainable when adjusting the L801 and L802, turn cores down clockwise before making adjustments.				

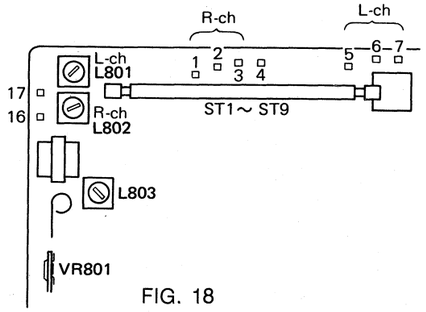


FIG. 18

RECORD/PLAYBACK HEAD AZIMUTH ADJUSTMENT

Playback a Standard Alignment Tape and turn Azimuth Adjusting Screw for maximum loudness.

*** Test Tape (6.3 kHz)**
VTT-652 or Equivalent

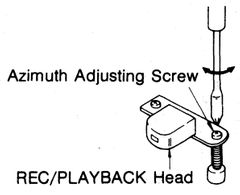


FIG. 19

EXPLODED VIEW OF CASSETTE PLAYER/RECORDER

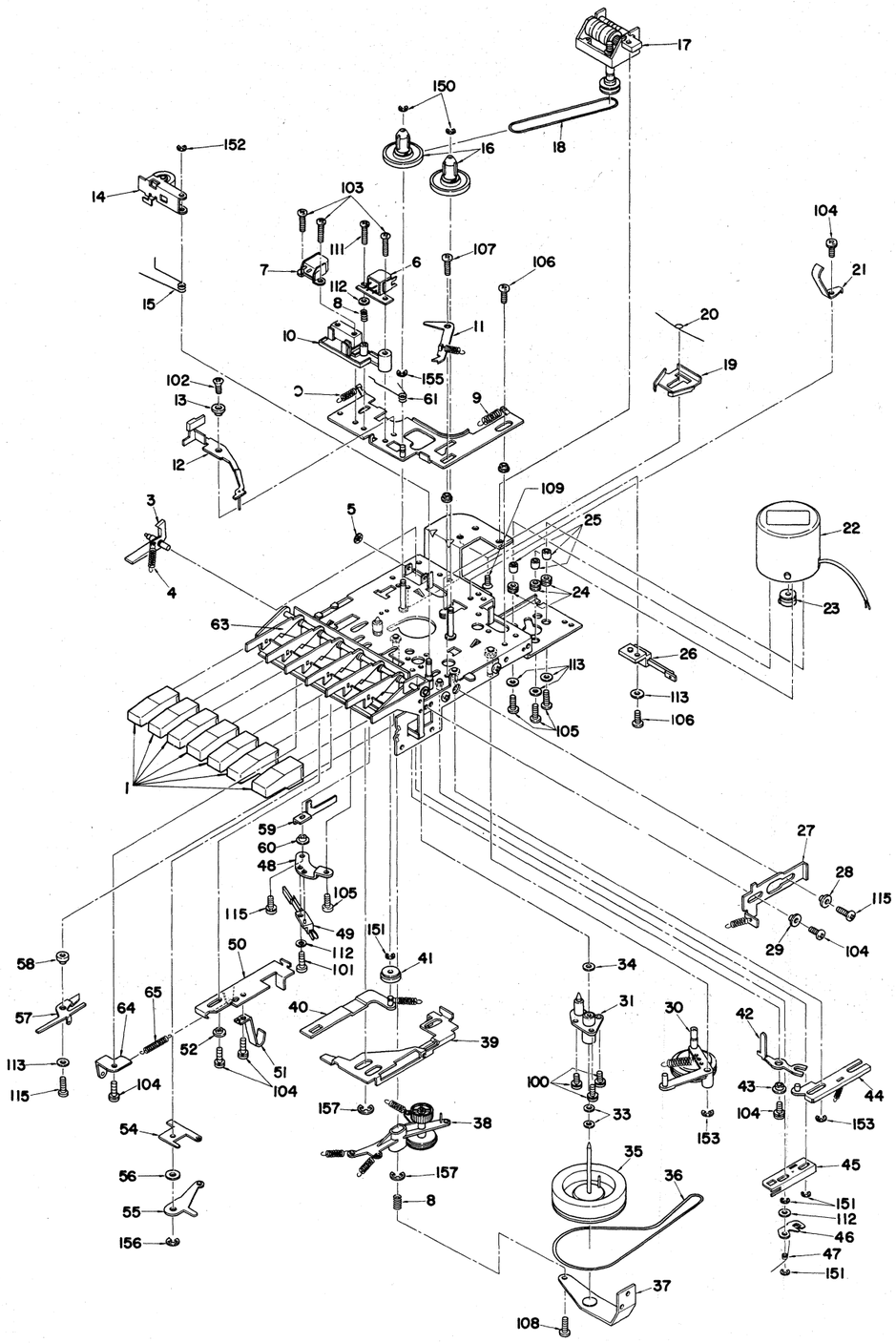


FIG. 20

WIRING DIAGRAM OF MOD

IC201		
PIN NO.	AM	FM
1	0.77V	0.78V
2	0V	0V
3	2.87V	2.89V
4	5.86V	5.92V
5	1.07V	1.08V
6	0V	0V
7	1.07V	1.08V
8	7.16V	7.09V
9	7.08V	0.82V
10	1.52V	1.00V
11	0.76V	0.76V
12	7.08V	0.82V
13	0.71V	0.53V
14	1.55V	0.81V
15	7.09V	0.82V
16	0.71V	0.53V

IC301		
PIN NO.	FM	FM ST
1	2.19V	2.15V
2	7.12V	7.05V
3	7.11V	7.04V
4	7.14V	7.06V
5	2.29V	2.25V
6	2.29V	2.47V
7	7.14V	4.86V
8	7.14V	4.79V
9	1.47V	1.43V
10	14.18V	0.82V
11	0V	0V
12	0.17V	1.00V
13	0V	0.90V
14	0.07V	0.06V
15	0.83V	0.86V
16	6.42V	6.37V

	TR101		TR102	TR103
S	6.2V	C	2.61V	6.85V
G	0.005V	B	1.58V	0.7V
D	0V	E	0.92V	0.01V
ID	8.9mA	Ic	0.9mA	—

	TR601,602	TR603,604
C	1.3V	10V
B	0.7V	1.3V
E	0.14V	0.7V
Ic	0.08mA	0.76mA

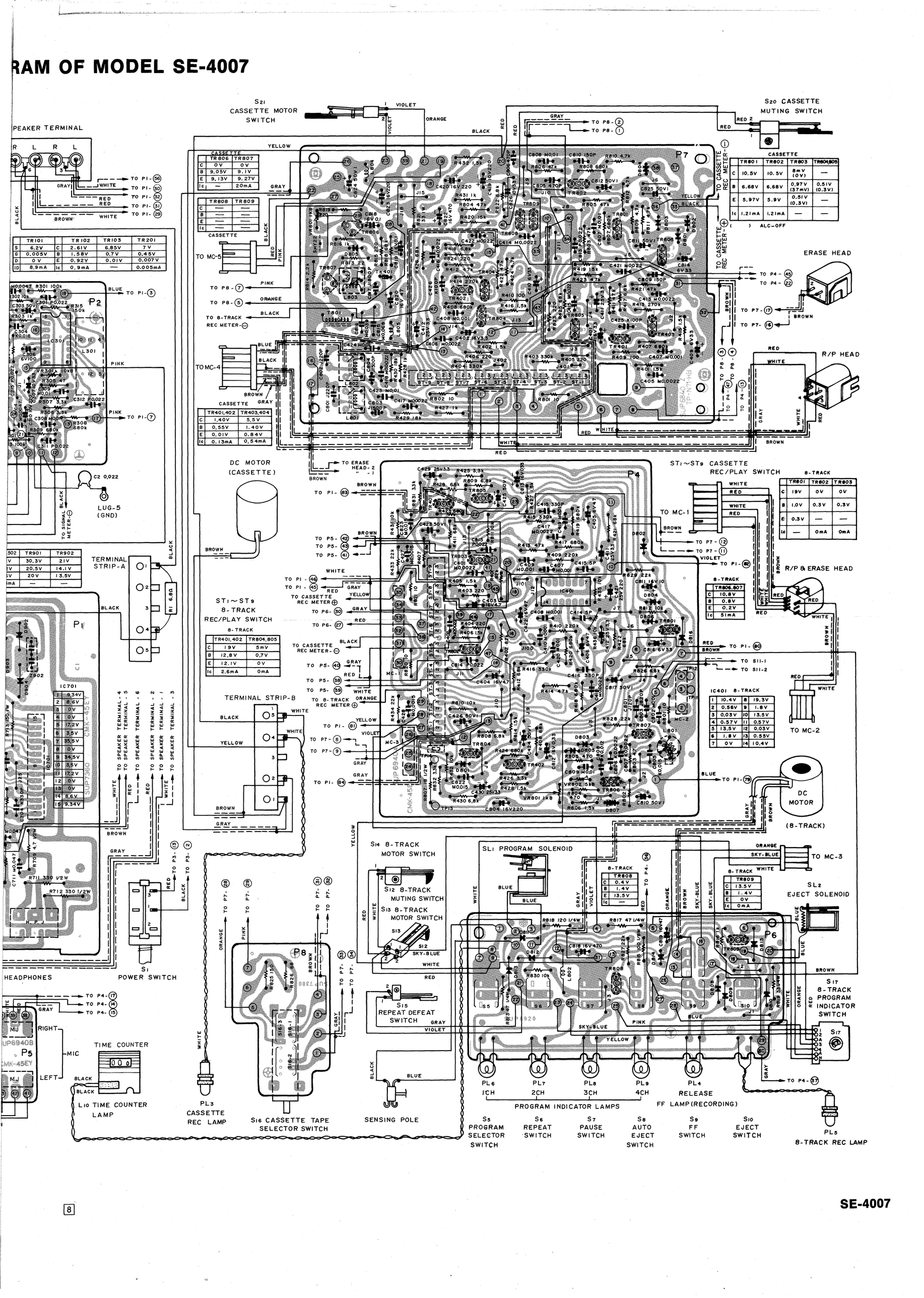
	TR501,502	TR901	TR902
C	7.8V	30.3V	21V
B	2.2V	20.5V	14.1V
E	1.6V	20V	13.5V
Ic	2.3mA	—	—

IC701	
1	9.34V
2	8.6V
3	0V
4	0V
5	17.2V
6	3.5V
7	35.5V
8	0V
9	34.5V
10	3.5V
11	17.2V
12	0V
13	0V
14	8.6V
15	9.34V

AC CORD
RECEPTACLE HOUSING
S19 POWER VOLTAGE SELECTOR SWITCH
FM INT ANT
FM ANT
AM ANT
REC TERMINAL
S11 WHISTLE DEFEAT SWITCH
SPEAKER TERMINAL
LUG-6 (GND)
FERRITE ANTENNA COIL
LUG-1 (GND)
LUG-2 (GND)
LUG-4 (GND)
LUG-3 (GND)
LUG-5 (GND)
PRIMARY
T1 POWER TRANSFORMER
SECONDARY
TO POWER SWITCH-1
TO POWER SWITCH-3
TO SIGNAL METER-
TO S18-1
TO S18-2
TO VC TERMINAL
TO PH
PL1 DIAL LIGHT LAMP
PL2 STEREO EYE LAMP
S18 AFC SWITCH
SF1~SF4 FUNCTION SELECTOR SWITCH
VR553,VR554 TREBLE CONTROL
VR551,VR552 BASS CONTROL
VR503 BALANCE CONTROL
VR501,VR502 VOLUME CONTROL
S3-1,S3-2 LOUDNESS SWITCH
HEADPHONES
S2-1,S2-2 Q, PLEX SWITCH
PL11 METER LAMP (DIAL POINTER)
PL12 METER LAMP
PL13 METER LAMP
SIGNAL METER
PL14 DIAL LIGHT LAMP
8-TRACK REC METER
CASSETTE REC METER
TERMINAL STRIP-A
TIME COUN
L10 TIME COUNT LAMP
SUP7080-1
SUP7360
SUP6940B
CMK-45EY

* This diagram might be modified without notice for further development of technology.

RAM OF MODEL SE-4007



CASSETTE	TR806	TR807
C	0V	0V
B	9.05V	9.1V
E	9.13V	9.27V
Ic	—	20mA

CASSETTE	TR808	TR809
C	—	—
B	—	—
E	—	—
Ic	—	—

CASSETTE	TR801	TR802	TR803	TR804,805
C	10.5V	10.5V	8mV (0V)	—
B	6.68V	6.68V	0.97V (37mV)	0.51V (0.3V)
E	5.97V	5.9V	0.51V (0.3V)	—
Ic	1.21mA	1.21mA	—	—

( ) ALC-OFF

	TR101		TR102	TR103	TR201
S	6.2V	C	2.61V	6.85V	7V
G	0.005V	B	1.58V	0.7V	0.45V
D	0V	E	0.92V	0.01V	0.007V
ID	8.9mA	Ic	0.9mA	—	0.005mA

	TR401,402	TR403,404
C	1.40V	5.5V
B	0.55V	1.40V
E	0.01V	0.84V
Ic	0.13mA	0.54mA

	TR501	TR502	TR901	TR902
C	30.3V	30.3V	21V	
B	20.5V	20.5V	14.1V	
E	20V	20V	13.5V	
Ic	—	—	—	

8-TRACK	TR401,402	TR804,805
C	1.9V	5mV
B	12.8V	0.7V
E	12.1V	0V
Ic	2.6mA	0mA

8-TRACK	TR801	TR802	TR803
C	1.9V	0V	0V
B	1.0V	0.3V	0.3V
E	0.3V	—	—
Ic	—	0mA	0mA

8-TRACK	TR806,807
C	10.8V
B	0.8V
E	0.2V
Ic	51mA

8-TRACK	TR808
C	0.4V
B	1.4V
E	13.5V
Ic	—

8-TRACK	TR809
C	13.5V
B	1.4V
E	0V
Ic	0mA

IC701			
1	9.34V	8	8.6V
2	8.6V	9	0V
3	0V	10	0V
4	0V	11	17.2V
5	17.2V	12	35.5V
6	3.5V	13	0V
7	35.5V	14	8.6V
8	0V	15	9.34V
9	34.5V		
10	3.5V		
11	17.2V		
12	0V		
13	0V		
14	8.6V		
15	9.34V		

IC401 8-TRACK			
1	10.4V	8	19.3V
2	0.56V	9	1.8V
3	0.03V	10	13.5V
4	0.57V	11	0.57V
5	13.5V	12	0.03V
6	1.8V	13	0.55V
7	0V	14	10.4V

SERVICING THE RECORD CHANGER – 1

DISASSEMBLY INSTRUCTIONS

■ Turntable Assembly

1. Remove automatic spindle (1).
2. Remove stopper ring (4) from the top of turntable shaft.
3. Carefully lift turntable assembly (5) off the shaft.

NOTE:

Before replacing the turntable assembly (5), move start lever (14) to the "START" position and move idler off latch (33) clockwise until idler wheel (11) disengages from capstan (35) and turntable (5).
This action will allow turntable (5) to drop into position without damaging the idler wheel (11).

■ Base Plate Assembly

1. Disconnect the unit from the power supply.
2. Be sure that the mechanism is in the neutral position and that pickup arm (6) is on its rest (10) and clamped.
3. Remove pickup leads from base plate (50).
4. Remove five screws (58, 68) which attach the base plate (50) to the main plate (12), so that base plate ass'y (50) can be removed easily.

NOTE:

When replacing base plate assembly (50), special care should be taken regarding the following points:

a) Shut off lever (43) must be placed on the switch side of the longest pin of trip lever (34).
b) Index plate (43) must be placed on start lever (11) side of select lever arm (24).
c) Push lever (15) must be placed on the cueing guide (7) side of the projecting part of actuating slide (50).

■ Pickup Arm Assembly

1. Disconnect the pickup leads from the terminals.
2. Remove base plate assembly (50).
3. Remove circlip (61), two springs (19, 23), washer (22) and collar (21) which is around lift shaft (7).
4. Remove pickup control lever ass'y (20) by loosening two screws (59).
5. Remove Nut (67) which holds pickup arm ass'y (6) and lift pickup arm ass'y (6) upward.

■ Cueing Lift Ass'y

1. Remove pickup arm ass'y (6) (step 3)
2. Remove nut (18), washer (17) and push collar.

NOTE:

Be careful not to drip silicone grease from collar.

■ Idler Wheel

1. Remove turntable (5).
2. Remove circlip (60) and carefully lift off idler wheel (14).

CAUTION:

Do not touch the friction surface of the idler wheel nor allow friction surface to come into contact with any oil or grease.

The record changer mechanism is well lubricated before leaving the factory, however, after prolonged use, it is advisable to re-lubricate certain parts.
A medium grade grease or oil should be applied to the points shown in Figs. 22 and 23.

CAUTION:

Do not touch the outside edge of the idler wheel or let it come into contact with any oil or grease.

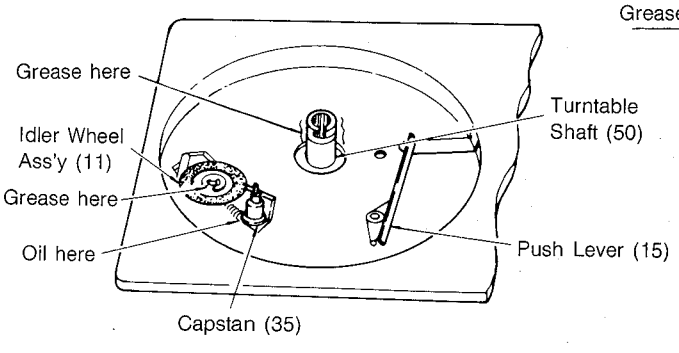


FIG. 22

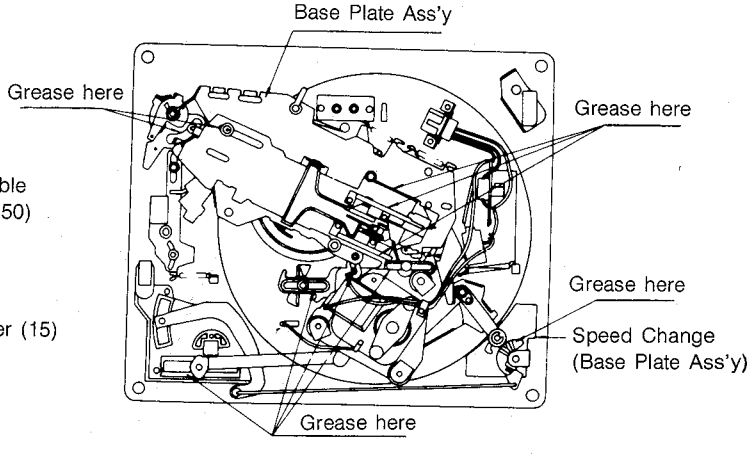


FIG. 23

EXPLODED VIEW OF RECORD CHANGER

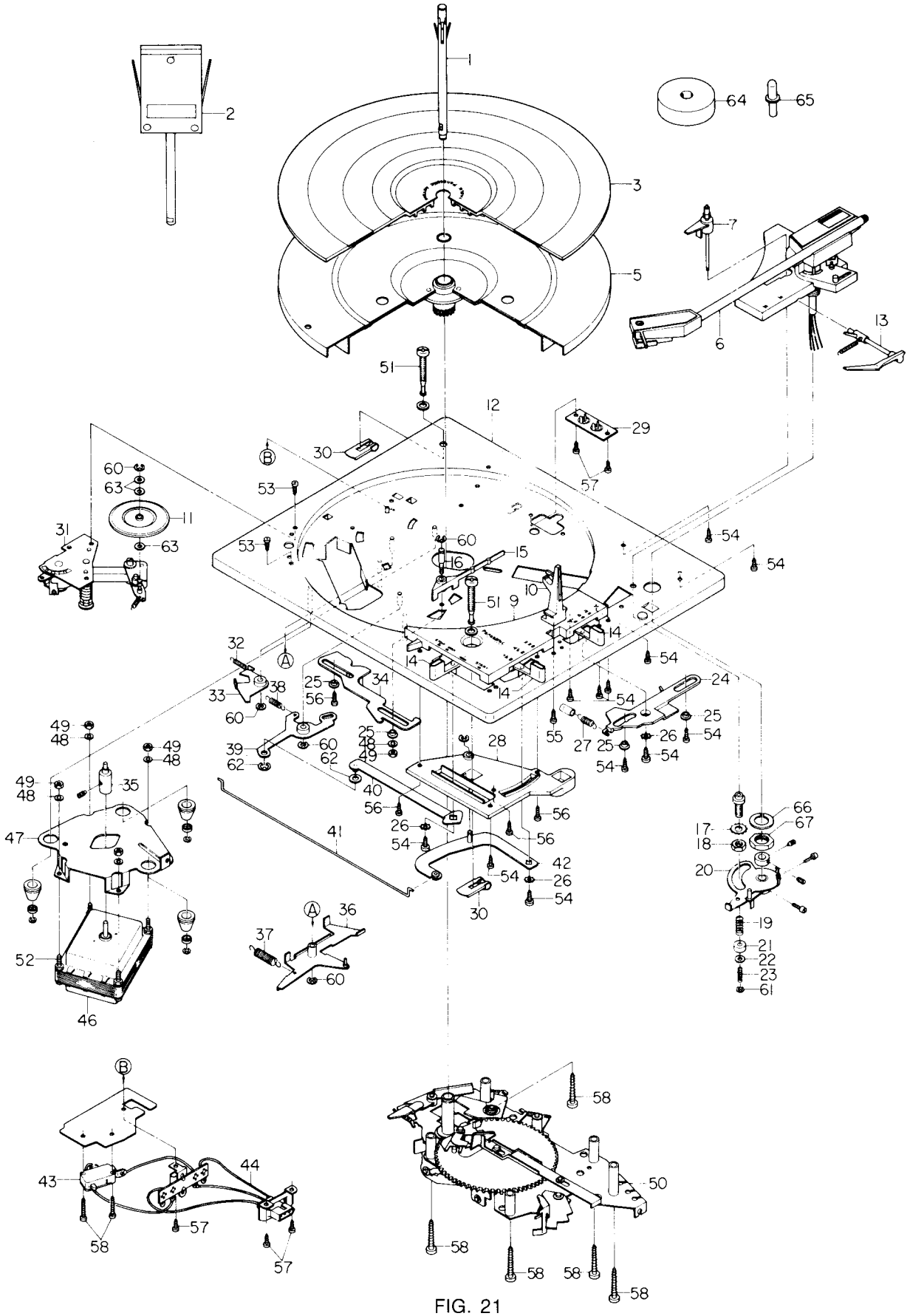


FIG. 21

SERVICING THE RECORD CHANGER—2

This unit has been subjected to the most rigorous inspections and tests before leaving the factory, where all necessary adjustments have been made to ensure the satisfactory playing of records.
The following information is provided, should it become necessary to make any minor adjustment.

■ **Stylus Pressure**
The stylus pressure should always be set as recommended by cartridge manufacture. (Use stylus pressure gauge). The pressure is adjusted by means of the stylus pressure adjusting screw (Fig. 24).
Turning the screw clockwise as viewed from the front increases the pressure, counterclockwise reduces the pressure.

■ **Anti-skating Control**
Having set the stylus pressure (3.5 gr. is recommended) and anti-skating control knob (Fig. 24) to the "▶" position, the anti-skating force is adjusted to correspond to the stylus pressure applied.
Moving knob toward "+" increases the anti-skating force, toward "−" reduces the force.

■ **Stylus Drop Point**
Turning the stylus drop point adjusting screw (Fig. 24) clockwise moves pickup inward, counterclockwise moves it outward.

■ **Pickup Arm Lifting Height**
If pickup arm (6) does not lift enough to clear the top record of a stack on the turntable when returning to its rest, turn the pickup lifting height adjusting screw (Fig. 26) counterclockwise to raise the pickup.
The stylus should lift 15.0 mm above the face of a single record on the turntable as pickup arm (6) returns to its rest (13). Turning the screw clockwise, pickup arm (6) is lowered.

■ **Idler Wheel Height**
To raise, turn screw counterclockwise, to lower, turn screw clockwise.
Adjust idler wheel (11) height as shown in Fig. 25.

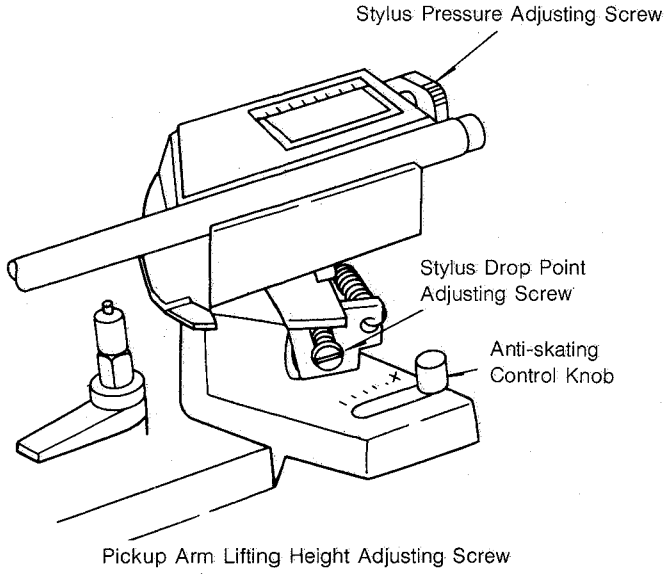

Stylus Pressure Adjusting Screw
Stylus Drop Point Adjusting Screw
Anti-skating Control Knob
Pickup Arm Lifting Height Adjusting Screw

FIG. 24

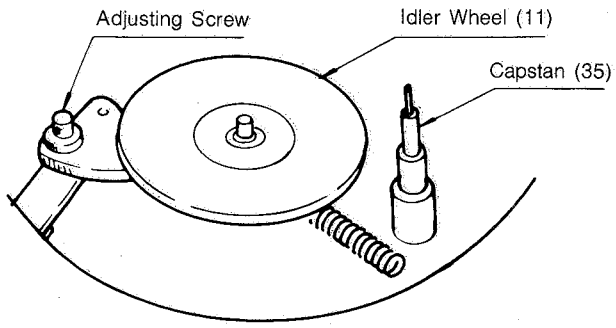


FIG. 25

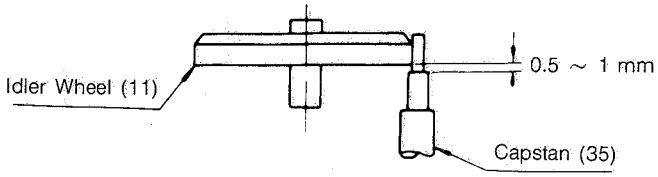
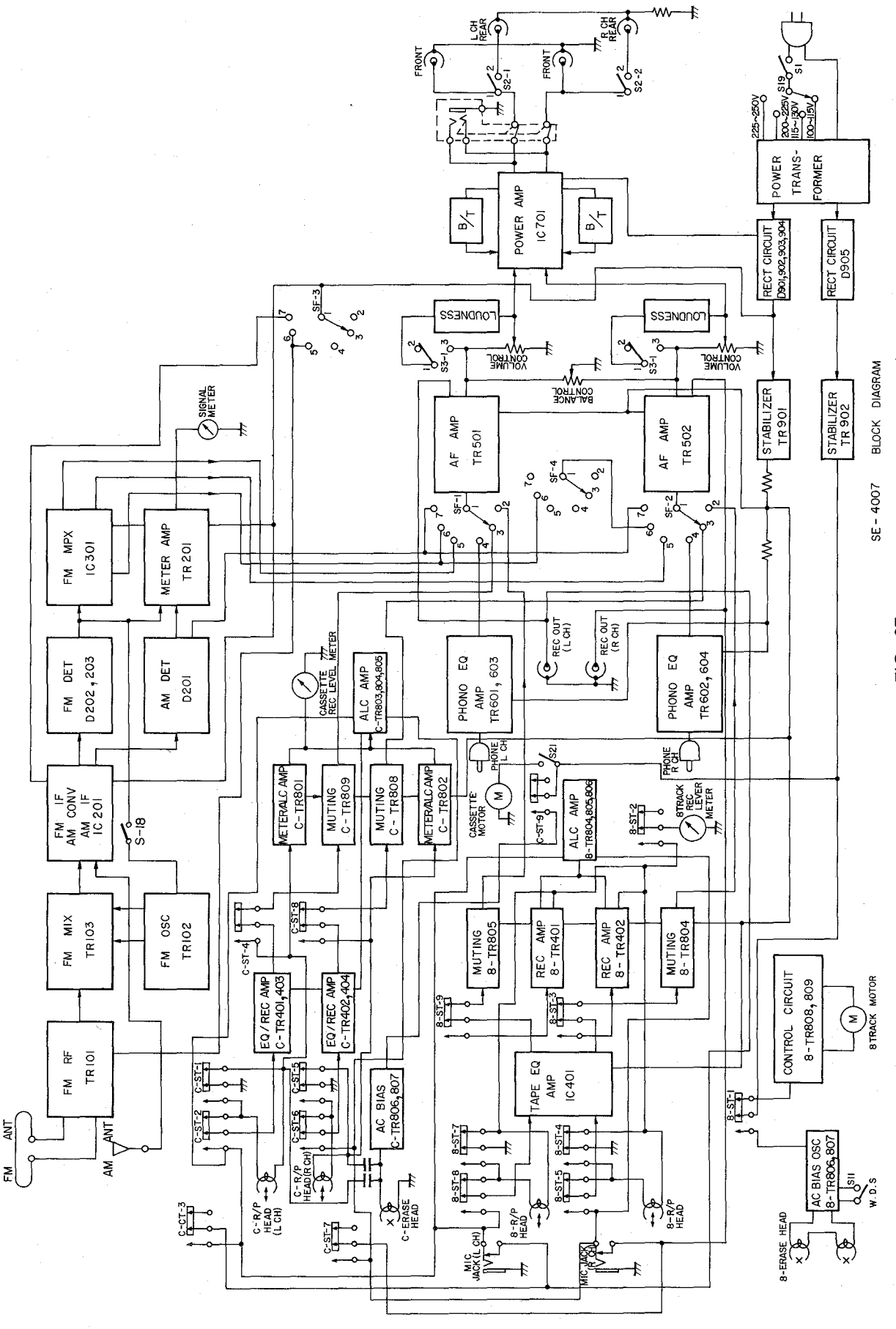


FIG. 26

BLOCK DIAGRAM OF MODEL SE-4007



SE-4007 BLOCK DIAGRAM

FIG. 27

REPLACEMENT PARTS LIST

NOTES: 1. Part numbers are indicated on most mechanical parts.
Please use this part number for parts orders.
2. Part numbers composed by bold face are service standard parts and may differ from production parts.
3. The term "M. Film" is the abbreviation of Metal Film.

Ref. No.	Part No.	Description	Per Set (pcs.)	Remarks
TRANSISTORS				
TR101	**2SK49**	Transistor, FM RF Amplifier	1	
TR102	**2SC1675-L**	Transistor, FM Oscillator	1	
TR103	2SC1675-L	Transistor, FM Mixer	1	
TR201	**2SC945L**	Transistor, Meter Amplifier	1	
TR501,502	**2SC1327**	Transistor, AF Amplifier	2	
TR601～604	**2SC1327**	Transistor, Phono Amplifier	4	
TR901	**2SC1383**	Transistor, Ripple Filter	1	
TR902	**2SC1398**	Transistor, Ripple Filter	1	
CASSETTE PLAYER/RECORDER				
TR401,402	**2SC1327**	Transistor, 1st EQ Amplifier	2	
TR403,404	**2SC1327**	Transistor, 2nd EQ Amplifier	2	
TR801～803	**2SC828**	Transistor, ALC Amplifier	3	
TR804,805	**2SC828**	Transistor, ALC Amplifier	2	
TR806	**2SB175**	Transistor, AC Bias OSC	1	
TR807	**2SB324**	Transistor, AC Bias Power Amplifier	1	
TR808,809	**2SC1684**	Transistor, Muting	2	
8-TRACK PLAYER/RECORDER				
TR401,402	**2SC828**	Transistor, REC	2	
TR801	**2SC828**	Transistor, ALC Amplifier	1	
TR802,803	**2SC828**	Transistor, ALC	2	
TR804,805	**2SC1684**	Transistor, Muting	2	
TR806,807	**2SC1383**	Transistor, AC Bias OSC	2	
TR808	**2SA564**	Transistor, Switching	2	
TR809	**2SC1383**	Transistor, Switching	1	
INTEGRATED CIRCUITS				
IC201	**AN217**	IC, IF Amplifier, AM Conv	1	
IC301	**AN271**	IC, FM MPX	1	
IC701	STK437	IC, Power Amplifier	1	○
8-TRACK PLAYER/RECORDER				
IC401	LA3122	IC, EQ Amplifier	1	
DIODES				
D101,102	**2OA90**	Diode, FM AGC	2	
D103	**SC15**	Diode, FM AFC	1	
D201	**2OA90**	Diode, AM DET	1	
D202,203	2OA90	Diode, FM DET	2	
D204	**2OA90**	Diode, AM Rectifier	1	
D205	VD1121	Diode, AOC	1	
D901～905	10D1	Diode, Rectifier	5	
D906	MA1075	Diode, AOC	1	
D907	MA1130	Diode, Stabilizer	1	
CASSETTE PLAYER/RECORDER				
D801,802	VD1121	Diode, Rectifier	2	
D803,804	**2OA90**	Diode, Rectifier	2	
D805	VD1121	Diode, Rectifier	1	
8-TRACK PLAYER/RECORDER				
D801～806	VD1121	Diode, Rectifier	6	
D807	**VD1213-1**	Diode, AOC	1	
D808～810	MA161	Diode, Switching	3	
D811～813	10D1	Diode, Damper, Switching	3	
D814	MA161	Diode, Switching	1	
D815	10D1	Diode, Damper	1	
D816	MA161	Diode, Switching	1	
THERMISTER				
TH401	RRT103	Thermister	1	

REPLACEMENT PARTS LIST

Ref. No.	Part No.	Description	Per Set (pcs.)	Remarks
LAMPS AND FUSES				
PL1	XAMQ33P	Pilot Lamp, Dial Light, 12.6V 380mA	1	
PL2,3	**XAMR34X500-1**	Pilot Lamp, Stereo Eye, REC 14V 60mA	2	
PL4	**XAMR53X300**	Pilot Lamp, Release FF	1	
PL5	**XAMR34X500-1**	Pilot Lamp, REC 14V 60mA	1	
PL6~9	**XAMR53X300**	Pilot Lamp, Channel 14V 50mA	4	
PL11~13	**XAMR34X500-1**	Pilot Lamp, Meter 14V 60mA	3	
F1	XBAS2A1201	Fuse 1.25A	1	
METER				
M1	SSM74	Meter, Signal Level	1	○
M2,3	SSM72	Meter, REC Level	2	○
COILS AND TRANSFORMER				
L1	SLF2D20-O	Ferrite Antenna Coil	1	
L101	SLA4N2-O	Antenna Coil, FM	1	
L102	RLD4N30	Coil, FM Detector	1	
L103	RLQY30S1-O	Coil, IF Trap	1	
L104	SLO4N12-O	Oscillator Coil, FM	1	
L202	RLO2M9-K	Oscillator Coil, AM	1	
L203	SLQU222-2Y	Coil, Radio Frequency	1	
L301	RLM1Z3Q-K	Coil, MPX	1	
L901,902	SLQY35S-2S	Coil, Radio Frequency	2	
T1	SLT5N32-W	Power Transformer	1	○
T101	RLI4M101	IFT, FM 1st	1	
T201	RLI7W105R-T	CFT, AM	1	
T202	RLI2M402	IFT, AM	1	
T203	RLI4M501-M	IFT, FM Discriminator	1	
T204	RLI4M502-M	IFT, FM Discriminator	1	
CF201,202	RVFCF10M12CR	Ceramic Filter, FM	2	
CASSETTE PLAYER/RECORDER				
L801,802	RLQC542-K	Coil, Bias Trap	2	

Ref. No.	Part No.	Description	Per Set (pcs.)	Remarks
L803	SLO9Z10-K	Coil, Bias Oscillator	1	
L804,805	ELQ-250A999	Coil, Radio Frequency	2	
T801	SLT6E2-D	Coil	1	
8-TRACK PLAYER/RECORDER				
L801	SLO9Z14-K	Coil, Bias Oscillator	1	
L802	ELQ-250A999	Coil, Radio Frequency	1	
COMPONENT COMBINATION				
Z201	**EXA5DL04C**	Component Combination, FM DET	1	
Z202	**EXAF203Z471**	Component Combination, AM DET	1	
Z901,902	EXNF2SL04C	Component Combination, Rectifier	2	
VARIABLE RESISTORS				
VR301	**EVLT0AA00B14**	Variable Resistor, Pre-set	1	
VR501,502	EWFN3AK30AF5	Variable Resistor, Volume Control	2	
VR503	EVH5SA363G55	Variable Resistor, Balance Control	1	
VR551,552	EVK8EA331C24	Variable Resistor, Bass Control	1	
VR553,554	EVK8EA331C24	Variable Resistor, Treble Control	1	
CASSETTE PLAYER/RECORDER				
VR801	**EVLT0AA00B13**	Variable Resistor, Pre-set, 1kB	1	
8-TRACK PLAYER/RECORDER				
VR801	EVLS3AA00B13	Variable Resistor, Pre-set, 1kB	1	
VR802	**EVLT0AA00B53**	Variable Resistor, Pre-set, 5kB	1	
VARIABLE CAPACITORS				
CT101,102 201,202	ECV5MX25X22G	Tuning Capacitor	1	
CT103	ECV1ZW10X32	Trimmer Capacitor	1	
SWITCHES				
S1	ESB7042T	Switch, Power ON/OFF	1	

REPLACEMENT PARTS LIST

Ref. No.	Part No.	Description	Per Set (pcs.)	Remarks
S2,3	SSH202	Switch, Loudness, Q'PLEX	1	
S5～10	SSH602	Switch, Program Selector, Repeat Pause, Auto Eject, FF, and Eject	1	
S11	SSS52	Switch, Whistle Defeat	1	
S16-1～3	RST53YAS-H	Switch, Cassette Tape Selector	1	
S18	**SSH50**	Switch, AFC	1	
S19	ESE3744	Switch, Voltage Selector	1	
ST1～9	ESD-846	Switch, REC/PLAY (Cassette)	1	
ST1～9	ESD-846	Switch, REC/PLAY (8-Track)	1	
SF1～4	SSR68K	Switch, Function Selector	1	
		RESISTORS		
R1	ERF7AK6R8	Cement 6.8 ohm 7W ±5%	1	
R101	**ERD25TJ104**	Carbon 100k ohm 1/4W ±5%	1	
R102	**ERD25TJ221**	Carbon 220 ohm 1/4W ±5%	1	
R103	**ERD25TJ472**	Carbon 4.7k ohm 1/4W ±5%	1	
R104	**ERD25TJ102**	Carbon 1k ohm 1/4W ±5%	1	
R105	**ERD25TJ683**	Carbon 68k ohm 1/4W ±5%	1	
R106	**ERD25TJ104**	Carbon 100k ohm 1/4W ±5%	1	
R107	**ERD25TJ183**	Carbon 18k ohm 1/4W ±5%	1	
R108	**ERD25TJ224**	Carbon 220k ohm 1/4W ±5%	1	
R109	**ERD25TJ331**	Carbon 330 ohm 1/4W ±5%	1	
R110	**ERD25TJ470**	Carbon 470 ohm 1/4W ±5%	1	
R111	**ERD25TJ224**	Carbon 220k ohm 1/4W ±5%	1	
R112	**ERD25TJ474**	Carbon 470k ohm 1/4W ±5%	1	
R113	**ERD25TJ100**	Carbon 10 ohm 1/4W ±5%	1	
R114	**ERD25TJ221**	Carbon 220 ohm 1/4W ±5%	1	
R201	**ERD25TJ152**	Carbon 1.5k ohm 1/4W ±5%	1	
R203	**ERD25TJ332**	Carbon 3.3k ohm 1/4W ±5%	1	
R204	**ERD25TJ470**	Carbon 47 ohm 1/4W ±5%	1	
R205	**ERD25TJ101**	Carbon 100 ohm 1/4W ±5%	1	
R206	**ERD25TJ470**	Carbon 47 ohm 1/4W ±5%	1	
R207	**ERD25TJ224**	Carbon 220k ohm 1/4W ±5%	1	
R208,209	**ERD25TJ102**	Carbon 1k ohm 1/4W ±5%	2	
R210	**ERD25TJ333**	Carbon 33k ohm 1/4W ±5%	1	
R211	**ERD25TJ332**	Carbon 3.3k ohm 1/4W ±5%	1	
R212	**ERD25TJ682**	Carbon 6.8k ohm 1/4W ±5%	1	
R213	**ERD25TJ104**	Carbon 100k ohm 1/4W ±5%	1	
R215	**ERD25TJ223**	Carbon 22k ohm 1/4W ±5%	1	
R216	**ERD25TJ333**	Carbon 33k ohm 1/4W ±5%	1	
R217	**ERD25TJ104**	Carbon 100k ohm 1/4W ±5%	1	
R218	**ERD25TJ104**	Carbon 100k ohm 1/4W ±5%	1	
R219	**ERD25TJ681**	Carbon 680 ohm 1/4W ±5%	1	
R220	**ERD25TJ333**	Carbon 33k ohm 1/4W ±5%	1	
R221	**ERD25TJ153**	Carbon 15k ohm 1/4W ±5%	1	
R301	**ERD25TJ104**	Carbon 100k ohm 1/4W ±5%	1	
R302	**ERD25TJ103**	Carbon 10k ohm 1/4W ±5%	1	
R303	**ERD25TJ102**	Carbon 1k ohm 1/4W ±5%	1	
R304	**ERD25TJ103**	Carbon 10k ohm 1/4W ±5%	1	
R305	**ERD25TJ470**	Carbon 47 ohm 1/4W ±5%	1	
R306,307	**ERD25TJ332**	Carbon 3.3k ohm 1/4W ±5%	2	
R308,309	**ERD25TJ684**	Carbon 680k ohm 1/4W ±5%	2	
R312	**ERD25TJ472**	Carbon 4.7k ohm 1/4W ±5%	1	
R313,314	**ERD25TJ682**	Carbon 6.8k ohm 1/4W ±5%	2	
R315	**ERD25TJ154**	Carbon 150k ohm 1/4W ±5%	1	
R505,506	**ERD25TJ155**	Carbon 1.5M ohm 1/4W ±5%	2	
R507,508	**ERD25TJ472**	Carbon 4.7k ohm 1/4W ±5%	2	
R509,510	**ERD25TJ681**	Carbon 680 ohm 1/4W ±5%	2	
R511,512	**ERD25TJ103**	Carbon 10k ohm 1/4W ±5%	2	
R513～516	**ERD25TJ683**	Carbon 68k ohm 1/4W ±5%	4	
R517,518	**ERD25TJ154**	Carbon 150k ohm 1/4W ±5%	2	
R519	**ERD25TJ470**	Carbon 47 ohm 1/4W ±5%	1	
R551,552	**ERD25TJ333**	Carbon 33k ohm 1/4W ±5%	2	
R553,554	**ERD25TJ103**	Carbon 10k ohm 1/4W ±5%	2	
R555,556	**ERD25TJ332**	Carbon 3.3k ohm 1/4W ±5%	2	
R557,558	**ERD25TJ681**	Carbon 680 ohm 1/4W ±5%	2	
R559,560	**ERD25TJ331**	Carbon 330 ohm 1/4W ±5%	2	
R561,562	**ERD25TJ101**	Carbon 100 ohm 1/4W ±5%	2	
R601,602	**ERD25TJ154**	Carbon 150k ohm 1/4W ±5%	2	
R603,604	**ERD25TJ102**	Carbon 1k ohm 1/4W ±5%	2	
R605,606	**ERD25TJ154**	Carbon 150k ohm 1/4W ±5%	2	
R607,608	**ERD25TJ472**	Carbon 4.7k ohm 1/4W ±5%	2	
R609,610	**ERD25TJ102**	Carbon 1k ohm 1/4W ±5%	2	
R611,612	**ERD25TJ682**	Carbon 6.8k ohm 1/4W ±5%	2	
R613,614	**ERD25TJ154**	Carbon 150k ohm 1/4W ±5%	2	
R615,616	**ERD25TJ224**	Carbon 220k ohm 1/4W ±5%	2	
R617	**ERD25TJ332**	Carbon 3.3k ohm 1/4W ±5%	1	
R701,702	**ERD25TJ274**	Carbon 270k ohm 1/4W ±5%	2	
R703,704	**ERD25TJ184**	Carbon 180k ohm 1/4W ±5%	2	
R705,706	**ERD25TJ821**	Carbon 820 ohm 1/4W ±5%	2	
R707,708	**ERD25TJ103**	Carbon 10k ohm 1/4W ±5%	2	
R709,710	**ERC50TJ4R7**	Solid 4.7 ohm 1/2W ±20%	2	
R711,712	**ERC50TJ331**	Solid 330 ohm 1/2W ±20%	2	
R713	**ERG1ANJ151**	M. Film 150 ohm 1W ±5%	1	
R714	**ERD25TJ104**	Carbon 100k ohm 1/4W ±5%	1	
R715,716	**ERD25TJ102**	Carbon 1k ohm 1/4W ±5%	2	
R903	**ERG1ANJ221**	M. Film 220 ohm 1W ±5%	1	
R904	**ERD25TJ682**	Carbon 6.8k ohm 1/4W ±5%	1	
R905	**ERD25TJ153**	Carbon 15k ohm 1/4W ±5%	1	
R906	**ERF5SJ471**	Cement 470 ohm 5W ±5%	1	
R907	**ERD25TJ220**	Carbon 22 ohm 1/4W ±5%	1	

REPLACEMENT PARTS LIST

Ref. No.	Part No.	Description	Per Set (pcs.)	Remarks
R908	**ERD14FJ151**	Carbon 150 ohm 1/4W ±5%	1	
R909	**ERF3SJ560**	Cement 56 ohm 3W ±5%	1	
R911	**ERD25TJ221**	Carbon 220 ohm 1/4W ±5%	1	
R912	**ERD25TJ391**	Carbon 390 ohm 1/4W ±5%	1	
CASSETTE PLAYER/RECORDER				
R401,402	**ERD25TJ152**	Carbon 1.5k ohm 1/4W ±5%	2	
R403,404	**ERD25TJ334**	Carbon 330k ohm 1/4W ±5%	2	
R405,406	**ERD25TJ221**	Carbon 220 ohm 1/4W ±5%	2	
R407,408	**ERD25TJ684**	Carbon 680k ohm 1/4W ±5%	2	
R409,410	**ERD25TJ101**	Carbon 100 ohm 1/4W ±5%	2	
R411,412	**ERD25TJ473**	Carbon 47k ohm 1/4W ±5%	2	
R413,414	**ERD25TJ274**	Carbon 270k ohm 1/4W ±5%	2	
R415,416	**ERD25TJ152**	Carbon 1.5k ohm 1/4W ±5%	2	
R417,418	**ERD25TJ682**	Carbon 6.8k ohm 1/4W ±5%	2	
R419,420	**ERD25TJ153**	Carbon 15k ohm 1/4W ±5%	2	
R421,422	**ERD25TJ473**	Carbon 47k ohm 1/4W ±5%	2	
R423,424	**ERD25TJ472**	Carbon 4.7k ohm 1/4W ±5%	2	
R425,426	**ERD25TJ683**	Carbon 68k ohm 1/4W ±5%	2	
R427,428	**ERD25TJ102**	Carbon 1k ohm 1/4W ±5%	2	
R429,430	**ERD25TJ183**	Carbon 18k ohm 1/4W ±5%	2	
R431	**ERD25TJ102**	Carbon 1k ohm 1/4W ±5%	1	
R432	**ERD25TJ152**	Carbon 1.5k ohm 1/4W ±5%	1	
R801,802	**ERD25TJ100**	Carbon 10 ohm 1/4W ±5%	2	
R803~806	**ERD25TJ473**	Carbon 47k ohm 1/4W ±5%	4	
R807,808	**ERD25TJ684**	Carbon 680k ohm 1/4W ±5%	2	
R809~812	**ERD25TJ472**	Carbon 4.7k ohm 1/4W ±5%	4	
R813	**ERD25TJ220**	Carbon 22 ohm 1/4W ±5%	1	
R814	**ERD25TJ222**	Carbon 2.2k ohm 1/4W ±5%	1	
R815	**ERD25TJ221**	Carbon 220 ohm 1/4W ±5%	1	
R816	**ERD25TJ102**	Carbon 1k ohm 1/4W ±5%	1	
R818	**ERD25TJ683**	Carbon 68k ohm 1/4W ±5%	1	
R819	**ERD25TJ221**	Carbon 220 ohm 1/4W ±5%	1	
R821	**ERG1ANJ330**	M. Film 33 ohm 1W ±5%	1	
R822	**ERD25TJ682**	Carbon 6.8k ohm 1/4W ±5%	1	
R823,824	**ERD25TJ221**	Carbon 220 ohm 1/4W ±5%	2	
R825	**ERD25TJ151**	Carbon 150 ohm 1/4W ±5%	1	
R826	**ERD25TJ680**	Carbon 68 ohm 1/4W ±5%	1	
8-TRACK PLAYER/RECORDER				
R401,402	**ERD25TJ823**	Carbon 82k ohm 1/4W ±5%	2	
R403,404	**ERD25TJ221**	Carbon 220 ohm 1/4W ±5%	2	
R405,406	**ERD25TJ152**	Carbon 1.5k ohm 1/4W ±5%	2	
R407,408	**ERD25TJ683**	Carbon 68k ohm 1/4W ±5%	2	

Ref. No.	Part No.	Description	Per Set (pcs.)	Remarks
R409,410	**ERD25TJ224**	Carbon 220k ohm 1/4W ±5%	2	
R411,412	**ERD25TJ683**	Carbon 68k ohm 1/4W ±5%	2	
R413,414	**ERD25TJ473**	Carbon 47k ohm 1/4W ±5%	2	
R415,416	**ERD25TJ334**	Carbon 330k ohm 1/4W ±5%	2	
R417~420	**ERD25TJ684**	Carbon 680k ohm 1/4W ±5%	4	
R421,422	**ERD25TJ683**	Carbon 68k ohm 1/4W ±5%	2	
R423,424	**ERD25TJ684**	Carbon 680k ohm 1/4W ±5%	2	
R425,426	**ERD25TJ332**	Carbon 3.3k ohm 1/4W ±5%	2	
R427,428	**ERD25TJ152**	Carbon 1.5k ohm 1/4W ±5%	2	
R429,430	**ERD25TJ682**	Carbon 6.8k ohm 1/4W ±5%	2	
R431,432	**ERD25TJ103**	Carbon 10k ohm 1/4W ±5%	2	
R433,434	**ERD25TJ223**	Carbon 22k ohm 1/4W ±5%	2	
R435,436	**ERD25TJ103**	Carbon 10k ohm 1/4W ±5%	2	
R801	**ERD25TJ100**	Carbon 10 ohm 1/4W ±5%	1	
R802,803	**ERD25TJ4R7**	Carbon 4.7 ohm 1/4W ±5%	2	
R804,805	**ERD25TJ471**	Carbon 470 ohm 1/4W ±5%	2	
R806	**ERD25TJ152**	Carbon 1.5k ohm 1/4W ±5%	1	
R807	**ERD50TJ180**	Carbon 18 ohm 1/2W ±5%	1	
R808,809	**ERD25TJ682**	Carbon 6.8k ohm 1/4W ±5%	2	
R810~812	**ERD25TJ103**	Carbon 10k ohm 1/4W ±5%	3	
R813	**ERD14FJ470**	Carbon 47 ohm 1/4W ±5%	1	
R814	**ERD25TJ152**	Carbon 1.5k ohm 1/4W ±5%	1	
R815	**ERD18FJ101**	Carbon 100 ohm 1/4W ±5%	1	
R816	**ERD25TJ102**	Carbon 1k ohm 1/4W ±5%	1	
R817	**ERD14FJ470**	Carbon 47 ohm 1/4W ±5%	1	
R818	**ERD14FJ121**	Carbon 120 ohm 1/4W ±5%	1	
R819	**ERD14FJ330**	Carbon 33 ohm 1/4W ±5%	1	
R820,821	**ERD25TJ100**	Carbon 10 ohm 1/4W ±5%	2	
R826	**ERD25TJ682**	Carbon 6.8k ohm 1/4W ±5%	1	
R827	**ERD25TJ223**	Carbon 22k ohm 1/4W ±5%	1	
R828,829	**ERD25TJ223**	Carbon 22k ohm 1/4W ±5%	2	
R830	**ERD25TJ103**	Carbon 10k ohm 1/4W ±5%	1	
R831,832	**ERD25TJ332**	Carbon 3.3k ohm 1/4W ±5%	2	
CAPACITORS				
C1,2	ECKD1H223PF	Ceramic 0.022mfd 50WV +100,−0%	2	
C3	**ECKD1H102KB**	Ceramic 0.001mfd 50WV ±10%	1	
C4	**ECKD1H472KB**	Ceramic 0.047mfd 50WV ±10%	1	
C102	**ECCD1H101JC**	Ceramic 100pF 50WV ±5%	1	
C103,104	**ECKD1H223PF**	Ceramic 0.022mfd 50WV +100,−0%	2	
C105	**ECKD1H102KB**	Ceramic 0.001mfd 50WV ±10%	1	
C106	**ECCD1H100FC**	Ceramic 10pF 50WV ±10%	1	
C107	**ECKD1H102KB**	Ceramic 0.001mfd 50WV ±10%	1	

REPLACEMENT PARTS LIST

Ref. No.	Part No.	Description	Per Set (pcs.)	Remarks
C108	**ECCD1H220JC**	Ceramic 22pF 50WV ±5%	1	
C109	**ECCD1H050CC**	Ceramic 5pF 50WV ±0.25%	1	
C110	**ECCD1H040CC**	Ceramic 4pF 50WV ±0.25%	1	
C111	**ECKD1H102KB**	Ceramic 0.001mfd 50WV ±10%	1	
C112	**ECKD1H100FC**	Ceramic 10pF 50WV ±10%	1	
C113	**ECCD1H010CC**	Ceramic 1pF 50WV ±0.25%	1	
C114	ECCD1H100KV	Ceramic 10pF 50WV ±10%	1	
C115,116	**ECCD1H070CC**	Ceramic 7pF 50WV ±0.25pF	2	
C117,118	**ECKD1H223PF**	Ceramic 0.022mfd 50WV +100,−0%	2	
C119	**ECCD1H120JC**	Ceramic 12pF 50WV ±5%	1	
C201	**ECCD1H070CC**	Ceramic 7pF 50WV ±0.25pF	1	
C202	**ECQM05473MZ**	Polyester 0.047mfd 50WV ±20%	1	
C203	**ECCD1H070CC**	Ceramic 7pF 50WV ±0.25pF	1	
C204	**ECCD1H270JC**	Ceramic 27pF 50WV ±5%	1	
C205.206	**ECKD1H223MD**	Ceramic 0.022mfd 50WV ±20%	2	
C207,208	**ECKD1H223PF**	Ceramic 0.022mfd 50WV +100,−0%	2	
C209	**ECEA16V10**	Electrolytic 10mfd 16WV	1	
C210	**ECKD1H223PF**	Ceramic 0.022mfd 50WV +100,−0%	1	
C211	**ECEA16V10**	Electrolytic 10mfd 16WV	1	
C212	**ECEA35V4R7**	Electrolytic 4.7mfd 35WV	1	
C214	**ECKD1H103MD**	Ceramic 0.01mfd 50WV ±20%	1	
C215	**ECKD1H223PF**	Ceramic 0.022mfd 50WV +100,−0%	1	
C216	**ECCD1H560JC**	Ceramic 56pF 50WV ±5%	1	
C217	**ECCD1H101JC**	Ceramic 100pF 50WV ±5%	1	
C218	**ECEA50V3R3**	Electrolytic 3.3mfd 50V	1	
C219	**ECEA16V10**	Electrolytic 10mfd 16WV	1	
C220	**ECCD1H181JC**	Ceramic 180pF 50WV ±5%	1	
C301	**ECKD1H223PF**	Ceramic 0.022mfd 50WV +100,−0%	1	
C302	**ECKD1H472KB**	Ceramic 0.0047mfd 50WV ±10%	1	
C303	**ECEA50V1**	Electrolytic 1mfd 50WV	1	
C304	**ECQG05183KZ**	Polyester 0.018mfd 50WV ±10%	1	
C305	**ECEA16V33**	Electrolytic 33mfd 16WV	1	
C306	**ECEA6V100**	Electrolytic 100mfd 6WV	1	
C307	**ECEA16V33**	Electrolytic 33mfd 16WV	1	
C308,309	**ECKD1H103MD**	Ceramic 0.01mfd 50WV ±20%	2	
C310	**ECEA10V220**	Electrolytic 220mfd 10WV	1	
C311,312	**ECKD1H223PF**	Ceramic 0.022mfd 50WV +100,−0%	2	
C314~316	**ECKD1H472KB**	Ceramic 0.0047mfd 50WV ±10%	3	
C501,502	**ECKD1H333PF**	Ceramic 0.033mfd 50WV +100,−0%	2	
C503,504	**ECKD1H471KB**	Ceramic 470pF 50WV ±10%	2	
C505,506	**ECEA50V1**	Electrolytic 1mfd 50WV	2	
C507,508	**ECKD1H223MD**	Ceramic 0.022mfd 50WV ±20%	2	
C509,510	**ECCD1H560JC**	Ceramic 56pF 50WV ±5%	2	
C511	**ECEA25V33**	Electrolytic 33mfd 25WV	1	
C551,552	ECAG16ER1	Electrolytic 0.1mfd 16WV	2	
C553,554	ECAG16ER47	Electrolytic 0.47mfd 16WV	2	
C555,556	**ECEA16V33**	Electrolytic 33mfd 16WV	2	
C557,558	**ECKD1H223MD**	Ceramic 0.022mfd 50WV ±20%	2	
C559,560	ECAG16ER1	Electrolytic 0.1mfd 16WV	2	
C601,602	ECAG16E1	Electrolytic 1mfd 16WV	2	
C603,604	**ECKD1H102KB**	Ceramic 0.001mfd 50WV ±10%	2	
C605,606	**ECKD1H153MD**	Ceramic 0.015mfd 50WV ±20%	2	
C607,608	**ECKD1H333MD**	Ceramic 0.033mfd 50WV ±20%	2	
C609,610	**ECKD1H333PF**	Ceramic 0.033mfd 50WV +100,−0%	2	
C611	**ECEA35V4R7**	Electrolytic 4.7mfd 35WV	1	
C701,702	**ECEA50V1**	Electrolytic 1mfd 50WV	2	
C703,704	**ECCD1H331JC**	Ceramic 330pF 50WV ±5%	2	
C705,706	**ECEA16V47**	Electrolytic 47mfd 16WV	2	
C707,708	**ECEA16V47**	Electrolytic 47mfd 16WV	2	
C709,710	**ECEA25V470**	Electrolytic 470mfd 25WV	2	
C711,712	**ECQ05473MZ**	Polyester 0.047mfd 50WV ±20%	2	
C713	**ECEA50V100**	Electrolytic 100mfd 50WV	1	
C714	**ECEA35V4R7**	Electrolytic 4.7mfd 35WV	1	
C715	**ECKD1H223PF**	Ceramic 0.022mfd 50WV +100,−0%	1	
C904	ECET50R222SU	Electrolytic 2200mfd 50WV	1	
C906	**ECKD1H103PF**	Ceramic 0.01mfd 50WV +100,−0%	1	
C907	**ECEA25V220**	Electrolytic 220mfd 25WV	1	
C908	**ECEA10V220**	Electrolytic 220mfd 10WV	1	
C910	ECET25R332SU	Electrolytic 3300mfd 25WV	1	
C911	**ECEA16V100**	Electrolytic 100mfd 16WV	1	
C912	ECKDDS101MB	Ceramic 0.01mfd 250WV ±20%	1	

CASSETTE PLAYER/RECORDER

C401,402	ECSZ16EF3R3	Tantalum 3.3mfd 16WV	2	
C405,406	**ECKD1H222KB**	Ceramic 0.0022mfd 50WV ±10%	2	
C407,408	**ECKD1H102KB**	Ceramic 0.001mfd 50WV ±10%	2	
C409,410	**ECEA16V33**	Electrolytic 33mfd 16WV	2	
C411,412	**ECEA50V3R3**	Electrolytic 3.3mfd 50WV	2	
C413,414	**ECKD1H222KB**	Ceramic 0.0022mfd 50WV ±10%	2	
C415,416	**ECKD1H223MD**	Ceramic 0.022mfd 50WV ±20%	2	
C417,418	**ECKD1H222KB**	Ceramic 0.0022mfd 50WV ±10%	2	
C419	**ECEA10V220**	Electrolytic 220mfd 10WV	1	
C420	**ECEA16V220**	Electrolytic 220mfd 16WV	2	
C421,422	**ECKD1H223MD**	Ceramic 0.022mfd 50WV ±20%	2	
C423,424	**ECKD1H103MD**	Ceramic 0.01mfd 50WV ±20%	2	
C425,426	**ECCD1H101JC**	Ceramic 100pf 50WV ±5%	2	
C801,802	**ECQS1221JZ**	Styrol 220pF 100WV ±5%	2	
C803,804	**ECQS1152JZ**	Styrol 1500pF 100WV ±5%	2	
C805,806	**ECKD1H471KB**	Ceramic 470pF 50WV ±10%	2	
C807,808	**ECKD1H103MD**	Ceramic 0.01mfd 50WV ±20%	2	
C809,810	**ECCD1H151JC**	Ceramic 150pF 50WV ±5%	2	

REPLACEMENT PARTS LIST

Ref. No.	Part No.	Description	Per Set (pcs.)	Remarks
C811,812	**ECEA50V1**	Electrolytic 1mfd 50WV	2	
C813	**ECKD1H223PF**	Ceramic 0.022mfd 50WV +100,−0%	1	
C814	**ECEA16V33**	Electrolytic 33mfd 16WV	1	
C815	**ECQM05683MZ**	Polyester 0.068mfd 50WV ±20%	1	
C816	**ECQM05393MZ**	Polyester 0.039mfd 50WV ±20%	1	
C817	ECQS1182JZ	Styrol 1800pF 100WV ±5%	1	
C818,819	ECAG16ER1	Electrolytic 0.1mfd 16WV	2	
C820	**ECEA16V47**	Electrolytic 47mfd 16WV	1	
C822	**ECEA16V470**	Electrolytic 470mfd 16WV	1	
C823	**ECEA16V220**	Electrolytic 220mfd 16WV	1	
C824	**ECEA50V1**	Electrolytic 1mfd 50WV	1	
C825	ECEA50V1L	Electrolytic 1mfd 50WV	1	
C826	**ECEB10V33**	Electrolytic 33mfd 10WV	1	
		8-TRACK PLAYER/RECORDER		
C401,402	**ECKD1H222KB**	Ceramic 0.0022mfd 50WV ±10%	2	
C403,404	ECSZ16EF4R7	Tantalum 4.7mfd 16WV	2	
C405,406	**ECEA6V47**	Electrolytic 47mfd 6WV	2	
C407~410	**ECKD1H102KB**	Ceramic 0.001mfd 50WV ±10%	4	
C411,412	**ECEA50V3R3**	Electrolytic 3.3mfd 50WV	2	
C413,414	**ECCD1H050CC**	Ceramic 5pF 50WV ±0.25pF	2	
C415,416	**ECCD1H331JC**	Ceramic 330pF 50WV ±5%	2	
C417,418	**ECKD1H222KB**	Ceramic 0.0022mfd 50WV ±10%	2	
C419,420	**ECKD1H103MD**	Ceramic 0.01mfd 50WV ±20%	2	
C421	**ECEA25V220**	Electrolytic 220mfd 25WV	1	
C422	**ECEA16V47**	Electrolytic 47mfd 16WV	1	
C423,424	**ECEA50V1**	Electrolytic 1mfd 50WV	2	
C425,426	**ECEA50V1**	Electrolytic 1mfd 50WV	2	
C427,428	**ECKD1H152KB**	Ceramic 0.0015mfd 50WV ±10%	2	
C429,430	**ECEA50V3R3**	Electrolytic 3.3mfd 50WV	2	
C801	ECQS1121JZ	Styrol 120pF 100WV ±5%	1	
C802	**ECQM05103MZ**	Polyester 0.01mfd 50WV ±20%	1	
C803	**ECQS1821JZ**	Styrol 820pF 100WV ±5%	1	
C804	**ECEA16V220**	Electrolytic 220mfd 16WV	1	
C805	ECQG05153KZ	Polyester 0.015mfd 50WV ±10%	1	
C806,807	ECQG05222KZ	Polyester 0.0022mfd 50WV ±10%	2	
C808	ECQG05123KZ	Polyester 0.012mfd 50WV ±10%	1	
C809	**ECQM05103MZ**	Polyester 0.01mfd 50WV ±20%	1	
C810	**ECEA50V1**	Electrolytic 1mfd 50WV	1	
C811	**ECEA16V10**	Electrolytic 10mfd 16WV	1	
C812,813	ECAG16ER33	Electrolytic 0.33mfd 16WV	2	
C814,815	**ECKD1H223PF**	Ceramic 0.022mfd 50WV +100,−0%	2	
C816	**ECEA16V33**	Electrolytic 33mfd 16WV	1	
C817	**ECEA50V1**	Electrolytic 1mfd 50WV	1	
C818	ECEA16V470LU	Electrolytic 470mfd 16WV	1	
C819	**ECEA16V47**	Electrolytic 47mfd 16WV	1	

Ref. No.	Part No.	Description	Per Set (pcs.)	Remarks
C822,823	**ECKD1H153MD**	Ceramic 0.015mfd 50WV ±20%	2	
		CHASSIS		
CH1	SDP184	Dial Pointer Assembly	1	○
CH2	SWE112	Rubber, Lamp Assembly	1	
CH3	RDD382YA	Drum, Dial	1	
CH4	RDS4090A	Spring, Drum	1	
CH5	RDR23	Roller	3	
CH6	RDR20	Roller	2	
CH7	RDY36	Shaft, Roller	5	
CH8	RNW150-2	Washer, Roller	5	
CH9	RDZ05-A	Dial Cord	170 cm	
CH10	RHR969ZA	Latch	7	
CH11	RHG109	Rubber, F.Ant.	2	
CH12	SDT9304	Tuning Shaft Assembly	1	
CH13	SUS184	Spring	11	
CH14	SUS206	Spring	1	
CH15	SHR102	Strain Relief, Power Cord	1	
CH16	SXE114	Arm, Eject Assembly	1	
CH17 (J1)	SJJ84	Jack, Head Phone	1	
CH18	SJF106-1	Holder, Pilot Lamp	1	
CH19	SJF4404	Terminal, Antenna	1	
CH20	SJF3204	Terminal, 2P	1	
CH21	SJF3408	Terminal, 4P	1	
CH22 (J2)	RJJ48A	Jack, Microphone	2	
CH23	ESA-2056	Remote Wire Assembly	1	
CH24	ESA-2057	Remote Wire Assembly	1	
CH25	SHR9014-2	Blind	1	
CH26	XTW3+10B	Screw, 3mm×10, Rear Board (6), Bottom Cover (5)	11	
CH27	XYN26+C8	Screw, 2.6mm×8, Cabinet	2	
CH28	XWE26D6B	Washer, 2.6mm, Cabinet	2	
CH29	XWE5X12BV-C	Washer, 5mm, Cabinet	4	
CH30	XSB4+16BVCS	Screw, 4mm×16, Cabinet	4	
CH31	XTV3+8B	Screw, 3mm×8, Escutcheon (5), 8-track (4)	9	
CH32	XTV3+8BR	Screw, 3mm×8, Cassette	7	
CH33	**RJA48Z-F**	Power Cord	1	
CH34	SWP70	PH Output Lead	1	
CH35	SWK178	Connector Assembly, 3P	1	
CH36	SWK222	Connector Assembly, Power Supply	1	
CH37	SWK224	Connector Assembly, 3P	1	
CH38	SWK226	Connector Assembly, 5P	1	
CH39	SWK160	Head Lead Assembly, 6P	1	
CH40	SWK102	Head Lead Assembly, 3P		

REPLACEMENT PARTS LIST

Ref. No.	Part No.	Description	Per Set (pcs.)	Remarks
		ACCESSORIES		
A1	SQX5778	Instruction Book	1	○
A11	SYE138	Head Cleaner Assembly	1	
A12	WM2201P	Microphone	2	
A13	WN133	Microphone Stand	2	
A14	QFT1TCCPRJZ	Demonstration Tape	1	
		CABINET		
CA1	SKA1864	Cabinet Assembly	1	○
CA1-1	SHG9058	Rubber Cushion, Dust Cover	2	
CA1-2	SBH2502-1	Holder, Hinge	2	○
CA2	SYE464	Dust Cover Assembly	1	○
CA3	SYU298	Bottom Board Assembly	1	
CA4	SKU2602	Rear Board (for Europe)	1	○
	SKU2600	Rear Board (for Far East)	1	○
CA5	SYE394	Cassette Lid Assembly	1	
CA6	SYL6-1	Foot Assembly	4	
CA7	SYE480	Cassette Cover Assembly	1	
CA7-1	SGX926	Trim, Counter	1	
CA7-2	SGE468	Window	1	
CA8	SBC158-1	Button, Reset (for Cassette)	1	
CA9	SUW932-1	Bracket, Reset (for Cassette)	1	
CA10	SXE108	Hook Assembly	1	
CA11	SYP282	Escutcheon Assembly	1	○
CA11-1	SGW3900	Escutcheon	1	○
CA11-2	SGE694	Transparent Plate	1	○
CA11-3	SGE692	Tinted Glass	1	○
CA11-4	SBC190	Button, Reset (for 8-Track)	1	
CA11-5	RGB221ZA	Badge, Panasonic	1	
CA12	SKD3780	Dial Plate	1	○
CA13	SBN704	Knob, Tuning	1	
CA14	SBN622K	Knob, Volume Control and Others	5	
CA15	SBC220	Push Button	9	○
CA16	SBC222	Push Button, Power and REC	2	○
CA17	RBC114ZA	Button, Tape Selector	1	
CA18	SGX970	Cartridge Lid	1	
		PACKING		
PA1	SPN2660	Carbon Inner	1	○
PA2	SPN2624	Pad, Upper	1	○
PA3	SPN2626	Pad, Front	1	○
PA4	SPS2628	Pad, Rear	1	○
PA8	SPN1586	Pad, Changer	1	
	SPG1820	Carton, Outer	1	
		SPEAKER SYSTEM (SB-3057)		
	SKA663	Speaker Enclosure	2	
	SGW2500	Grill	2	
	SKU1060-1	Rear Board	2	
	EAS20PL59S	Woofer, 20 cm, 8 ohms	2	
	EAS5PH50S	Tweeter, 5 cm, 8 ohms	2	
	SGN1260	Name Plate	2	
	SGB321	Badge	2	
	XNK2W	Speed Nut, Badge	2	
	ECEA50Y1	Electrolytic Capacitor 1mfd	2	
	SJR302	Terminal Board	2	
	SPN1572	Carton, Speaker System	1	
	SPN1602	Pad, Bottom and Upper	2	
	SPN1574	Pad	2	
	SPN1576	Pad, Center	1	
	RJP4B	Speaker Cord	2	
		CASSETTE TAPE PLAYER/RECORDER (SJD84)		
1	SBC200-1	Push Button	7	
3	SMQ1232	Lever, REC Safety	1	
4	SMQ662	Spring, REC Safety Lever	1	
5	SNE432	Circlip, REC Safety Lever	1	
6	SJH30	R/P Head	1	
7	SJH14	Erase Head	1	
8	SMQ678	Spring, R/P Head and Flywheel Retainer	2	
9	SMQ1360	Spring A, Head Panel	2	
10	SMQ1362-1	Base Assembly, Head	1	
11	SMQ1388	Eject Stop Lever w/Spring	1	
12	SMQ1390	Lever Assembly, Auto-Stop	1	
13	SMQ1392	Spacer, Auto-Stop Lever	1	
14	SMQ1364	Pressure Roller Assembly	1	
15	SMQ1366	Spring, Pressure Roller	1	
16	SMQ1626	Reel Table	2	
17	SMQ1344	Tape Counter	1	

REPLACEMENT PARTS LIST

Ref. No.	Part No.	Description	Per Set (pcs.)	Remarks
18	SMQ1056	Belt, Counter	1	
19	SMQ1354	Brake Arm	1	
20	SMQ1358	Spring Brake Arm	1	
21	SMQ1394	Spring, Tape Holder	1	
22	MHT5PS	DC Motor	1	
23	SMQ1384	Motor Pulley w/Screw (XXA2A-3)	1	
24	SMQ716	Rubber Cushion, Motor	3	
25	SMQ718	Spacer, Motor	3	
26	SMQ1378	Leaf Switch, Motor ON-OFF (S21)	1	
27	SMQ1396	Lever, Eject Slide, w/Spring	1	
28	SMQ1374	Spacer A, Eject Slide Lever	1	
29	SMQ1398	Spacer B, Eject Slide Lever	1	
30	SMQ1368	Clutch Assembly w/Spring	1	
31	SMQ1370-1	Bearing Flywheel	1	
33	SMQ148	Washer, Oil Thrower	2	
34	SMQ1402	Nylon Washer	1	
35	SMQ688	Flywheel	1	
36	SMQ1372	Belt, Main	1	
37	SMQ1404	Retainer, Flywheel	1	
38	SMQ1382-1	FF Arm Assembly w/Spring	1	
39	SMQ1406	Operation Plate Brake	1	
40	SMQ1408	Rewind Arm w/Spring	1	
41	SMQ1386	Rewind Idler	1	
42	SMQ1410	Pause Lever	1	
43	SMQ1412	Spacer, Pause Lever	1	
44	SMQ1414	Pause Slide Lever A w/Spring	1	
45	SMQ1416	Pause Slide Lever B	1	
46	SMQ1376	Pause Click Lever	1	
47	SMQ1418	Spring, Pause Click Lever	1	
48	SMQ1528	Bracket, Amp Switch	1	
49	SMQ1380	Leaf Switch, Tape Amp ON-OFF (S20)	1	
50	SMQ1650	Lever, REC Slide	1	
51	SUS208-1	Spring, REC Switch	1	
52	SMQ1426	Spacer, REC Slide Lever	1	
54	SMQ1430	Rewind Lever	1	
55	SMQ1432	FF Lever	1	
56	SMQ1434	Nylon Washer 6.1mm	1	
57	SMQ1436-1	Lever, Auto-Stop Drive	1	
58	SMQ1438	Spacer, Auto-Stop Lever	1	
59	SMQ1530	Play Lever	1	
60	SMQ1524	Spacer, Play Lever	1	
61	SMQ1444	Spring B, Head Panel	1	
63	SMQ1654	Push Button Frame Assembly	1	
64	SMQ1652	Spring, Hanger	1	
65	SMQ1638	REC Lever Spring	1	
100	XYN2+C5	Screw 2mm × 5	3	
101	XYN2+8	Screw 2mm × 8, Amp Switch	1	
102	XSS2+5	Screw 2mm × 5	1	
103	XSN2+10	Screw 2mm × 10	3	
104	XYN26+C5	Screw 2.6mm × 5	6	
105	XSN26+6	Screw 2.6mm × 6	4	
106	XSB26+4	Screw 2.6mm × 4, Head Panel	2	
107	XSB26+6	Screw 2.6mm × 6, Head Panel	1	
108	XSN26+10	Screw 2.6mm × 10	1	
109	XSS3+5S	Screw 3mm × 5, Counter Mounting	2	
111	XSN2D6	Screw 2mm × 6	1	
112	XWE2A6	Washer 2mm	3	
113	XWE26D7	Washer 2.6mm 0.5t	5	
115	XYN26+C6	Screw 2.6mm × 6, Play Lever	3	
150	XUC12FT	Circlip 1.2mm	2	
151	XUC15FT	Circlip 1.5mm	4	
152	XUCS19	Circlip 1.9mm	1	
153	XUC2FT	Circlip 2mm	2	
155	XUC25FT	Circlip 2.5mm	1	
156	SUC32FT	Circlip 3.2mm	1	
157	SUC4FT	Circlip 4mm	2	

8-TRACK PLAYER/RECORDER ASSEMBLY (SJD208)

Ref. No.	Part No.	Description	Per Set (pcs.)	Remarks
1	SMQ1464	8-Track Cover	1	
2	SMQ290	Pulley, 8-Track Cover	2	
3	SMQ1630	Motor ON-OFF Switch (S12, 13)	1	○
5	SMQ1590	Motor ON-OFF Switch (S14)	1	
7	SMQ1622	4 Cam Assembly	1	
8	SMQ1470-1	Solenoid Assembly	1	○
9	SMQ1592	Flywheel Assembly	1	
10	SMQ1594	Cam, Channel Switching	1	
11	SMQ1596	Shaft Assembly, Flywheel	1	
12	SMQ1478	Thrust Washer	1	
13	SMQ1480	F Washer	1	
14	SMQ1842-1	Tape Guide Assembly	1	
15	SMQ1484	Pressure Roller Arm Assembly	1	
16	SMQ1518	Pulley, Pressure Roller Arm	1	
17	SMQ1486	Metal, Pressure Roller Arm	1	
18	SMQ1488	Spring, Pressure Roller Arm	1	
19	SMQ1490	Head Housing	1	
20	SMQ1492	Screw, Height Adjust	1	
21	SMQ1494	Lug Bracket	1	
22	WY823F	Head	1	
23	SMQ1496	Head Base	1	
24	SMQ1498	Spring, Head Support	1	

REPLACEMENT PARTS LIST

Ref. No.	Part No.	Description	Per Set (pcs.)	Remarks
25	SMQ342	Spring, Head Vertical Adjust	1	
26	SMQ1500	Cord Clamp	1	
27	MYF5BEX3-U3	Motor	1	○
28	SMQ1502	Belt	1	
29	SMQ1504	Insulator	3	
30	SMQ1628	Pulley, Motor	1	○
33	SMQ1634	REC Lever	1	○
34	SMQ1600	Collar, REC Lever	2	
35	SMQ1636	Bracket	1	○
36	SMQ1638	Spring, REC Lever	1	○
37	SMQ1604	REC Push Arm A	1	
38	SMQ1608	Collar, REC Push Arm	1	
39	SMQ1516	Spring, REC Push Arm	1	
40	SMQ1584-1	Switch Plate	2	○
41	SMQ1606	REC Push Arm B	1	
42	SMQ1610	Gear	1	
43	SMQ1612	Kick Plate Ass'y	1	
44	SMQ1614	Stop Plate	1	
45	SMQ1616	Collar, Stop Plate	1	
46	SMQ1618	EJECT Solenoid Ass'y	1	
47	SMQ1620	Spring, Kick Plate	1	
48	SUS208	Spring Plate, REC Switch	1	○
49	SMQ1632	Repeat Defeat Switch (S15)	1	○
100	XSN3+6S	Screw, 3mm×6	11	
101	XSN3+8S	Screw, 3mm×8	4	
102	XSN3+10S	Screw, 3mm×10	1	
103	XSN3+12S	Screw, 3mm×12	2	
104	XYN3+C5S	Screw w/Washer, 3mm×5	6	
105	XSN3D6S	Screw, 3mm×6	2	
106	XSN26+8	Screw, 2.6mm×8	1	
107	XSN26+10	Screw, 2.6mm×6	3	
108	XWE3D8	Washer, 3mm	3	
109	XWE3E10	Washer, 3mm	1	
111	XWE26D75	Washer, 2.6mm	3	
112	XWA3B	Spring Washer, 3mm	1	
113	XNG3B	Nut, 3mm	1	
115	XUC15FT	Circlip, 1.5ϕ	1	
116	XUC23FT	Circlip, 2.3ϕ	2	
117	XWE45E10	Washer, 4.5ϕ	1	
118	XSN2+8	Screw, 2mm×8	1	
119	XUC3FT	Circlip, 3ϕ	1	
120	XYN26+6	Screw, 2.6mm×6	1	

Ref. No.	Part No.	Description	Per Set (pcs.)	Remarks
AUTOMATIC RECORD CHANGER SP-910JM				
1	SFVS910-1Z	Automatic Spindle	1	
2	SH45A	45 r.p.m. Automatic Spindle	1	
3	SFTG910C1A	Turntable Mat Assembly	1	
4	SFXT910-1	Stopper Ring	1	
5	SFTE913-1E	Turntable Assembly	1	
6	EPU-24SMGD	Pickup Arm Assembly	1	
7	SFKR910-1A	Lift Assembly	1	
9	SFKC913B01	Escutcheon Moulding B	1	
10	SFKU913-1A	Arm Rest Assembly	1	
11	SFMI411-1E	Idler Wheel Assembly	1	
12	SFBP913AA	Main Plate Assembly	1	
13	SFKT910-1E	Cueing Lever Assembly	1	
14	SFKT910A1	Speed Selector Lever	1	
15	SFUM910-2	Push Lever	1	
16	SFXG910-1	Shaft	1	
17	XWA8BFX	Spring Washer	1	
18	XNG8HFX	Nut	1	
19	SFQA910-5	Spring	1	
20	SFUP910-6A	P.U. Control Lever Rivetting Assembly	1	
21	SFXB910-7	Collar	1	
22	SFXW910-5	Washer	1	
23	SFQA910-4	Spring	1	
24	SFUM910-3	Select Lever	1	
25	SFXW910-1	Collar	4	
26	XWC4BFY	Washer	1	
27	SFQH327-2	Spring	1	
28	SFUM910-5	Knob Slide Base	1	
29	SJF3201-1	Pin Jack Receptacle	1	
30	SFUP411-6	Retaining Clip	2	
31	SFMT910-1A	Speed Change Base Plate Assembly	1	
32	SFQH831-2	Spring	1	
33	SFUP910-2E	Idler Off Latch Assembly	1	
34	SFUM910-1	Trip Lever	1	
35	SFMC9106(60Hz)	Capstan (SFMC9105: 50Hz)	1	
36	SFUP910-1E	Idler Off Lever	1	
37	SFQH910-1	Spring	1	
38	SFQH910-2	Spring	1	
39	SFUP910-3E	Reject Rod B Assembly	1	
40	SFUP910-4E	Reject Rod A Assembly	1	
41	SFQS910-1	Speed Change Rod	1	
42	SFUP910-5E	Speed Change Lever	1	
43	SFDSAM320039	Switch	1	
44	SFDA910G01	AC Plug Assembly	1	
46	4M-15V1PL	Motor Assembly	1	
47	SFMF910J-01	Motor Plate Assembly	1	
48	SWA4BFM	Spring Washer	3	

REPLACEMENT PARTS LIST

Ref. No.		Part No.	Description	Per Set (pcs.)	Remarks			
49		XNG4HFU	Nut	3				
50		SFUK910-1Z	Base Plate Complete Assembly	1				
51		SFXG411-1	Transit Screw	2				
52		XSN3+40FU	Screw	6				
53		XTU3+6BFU	Screw	6				
54		XTN3+8BFU	Screw	17				
55		XTN3+12BFU	Screw	1				
56		XTN3+10BFU	Screw	5				
57		XTN3+6BFU	Screw	5				
58		XTN4+30DFU	Screw	4				
59		XXA3D5FU	Screw	2				
60		XUC3FY	Circlip	17				
61		XUC2FY	Circlip	5				
62		XUC4FY	Circlip	3				
63		SFXW551D2	Washer	7				
64		SFVA910-10	45 r.p.m. Manual Spindle	1				
65		SFVS910-17	Manual Spindle	1				
66		XWB145BFY	Washer	1				
67		SFP-EN9701	Nut	1				
68		XTN4+35BFU	Screw	1				
		EPC-34STGD	Cartridge, Ceramic	1				
		EPS-18STSD	Stylus, Diamond	1				
69		SFQC411-1	Spring	4				
		ERD12TJ100	10 ohm 1/2W Solid	1				
		ECQH6103Z	0.01mfd Metalized Polyester	1				

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760807T-(G)

ORDER NO. TSD-7609-592-1

Service Manual

FM/AM/FM STEREO RADIO WITH 8-TRACK PLAYER/RECORDER, CASSETTE PLAYER/ RECORD AND RECORD CHANGER

Compact Stereo

SE-4007

Supplementary-1

★ This service manual includes only the additional information for the original service manual of model SE-4007 (ORDER NO. TSD-7608-592).
★ This supplementary issue should be filed with the original service manual.
★ When servicing model SE-4007, this supplementary and the original one should be referred.

PARTS MODIFICATIONS

The following replacement parts of model SE-4007 is changed to improve the performance.

Ref. No.	Part No. Original S/M ➡ New		Description	Remarks
INTEGRATED CIRCUIT AND TRANSISTOR 8-TRACK PLAYER/RECORDER				
IC401	LA3122	.....	.....	
TR403~408	.....	2SC1327	Transistor, EQ Amplifier	
RESISTORS 8-TRACK PLAYER/RECORDER				
R435, 436	ERD25TJ103	.....	.....	
R441, 442	.....	ERD25TJ104	Carbon 100k ohm 1/4W ±5%	
R443, 444	.....	ERD25TJ391	Carbon 390 ohm 1/4W ±5%	
R445, 446	.....	ERD25TJ124	Carbon 120k ohm 1/4W ±5%	
R447, 448	.....	ERD25TJ822	Carbon 8.2k ohm 1/4W ±5%	
R449, 450	.....	ERD25TJ332	Carbon 3.3k ohm 1/4W ±5%	
R451, 452	.....	ERD25TJ331	Carbon 330 ohm 1/4W ±5%	
CASSETTE PLAYER/RECORDER				
R433, 434	.....	ERD25TJ184	Carbon 180k ohm 1/4W ±5%	Backing
CAPACITORS 8-TRACK PLAYER/RECORDER				
C431, 432	.....	ECKD1H102KB	Ceramic 0.001mfd ±10%	Backing
CASSETTE PLAYER/RECORDER				
C401, 402	ECSZ16EF3R3E	ECSZ16EF4R7E	Tantalum 4.7mfd 16WV	
TRANSFORMER				
T1	SLT5N32-W	SLT5N32-W1	Power Transformer	○

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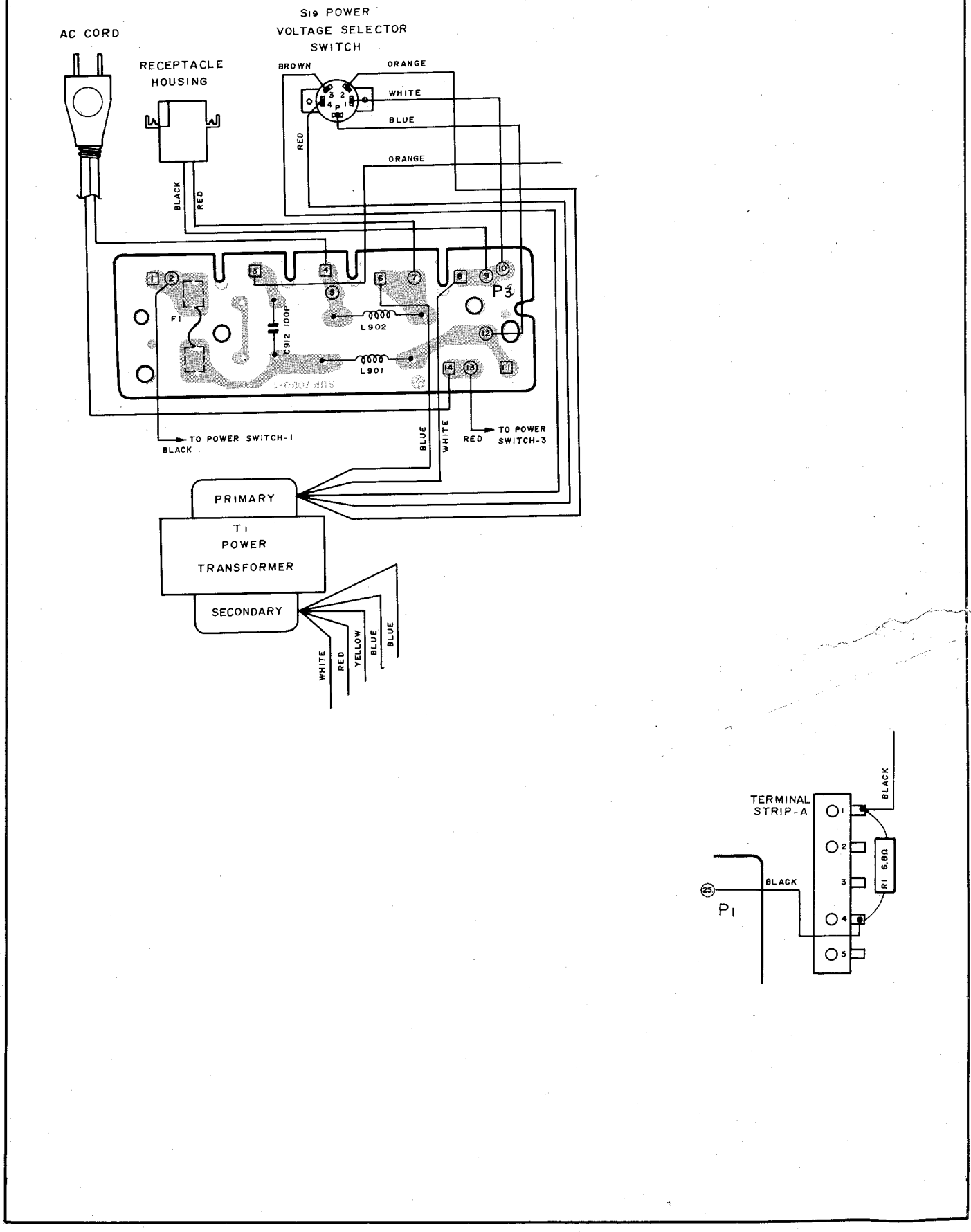
ORIGINAL S/M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L902
L901
P3
TO POWER SWITCH-1
BLACK
BLUE
WHITE
RED
TO POWER SWITCH-3
PRIMARY
T1
POWER
TRANSFORMER
SECONDARY
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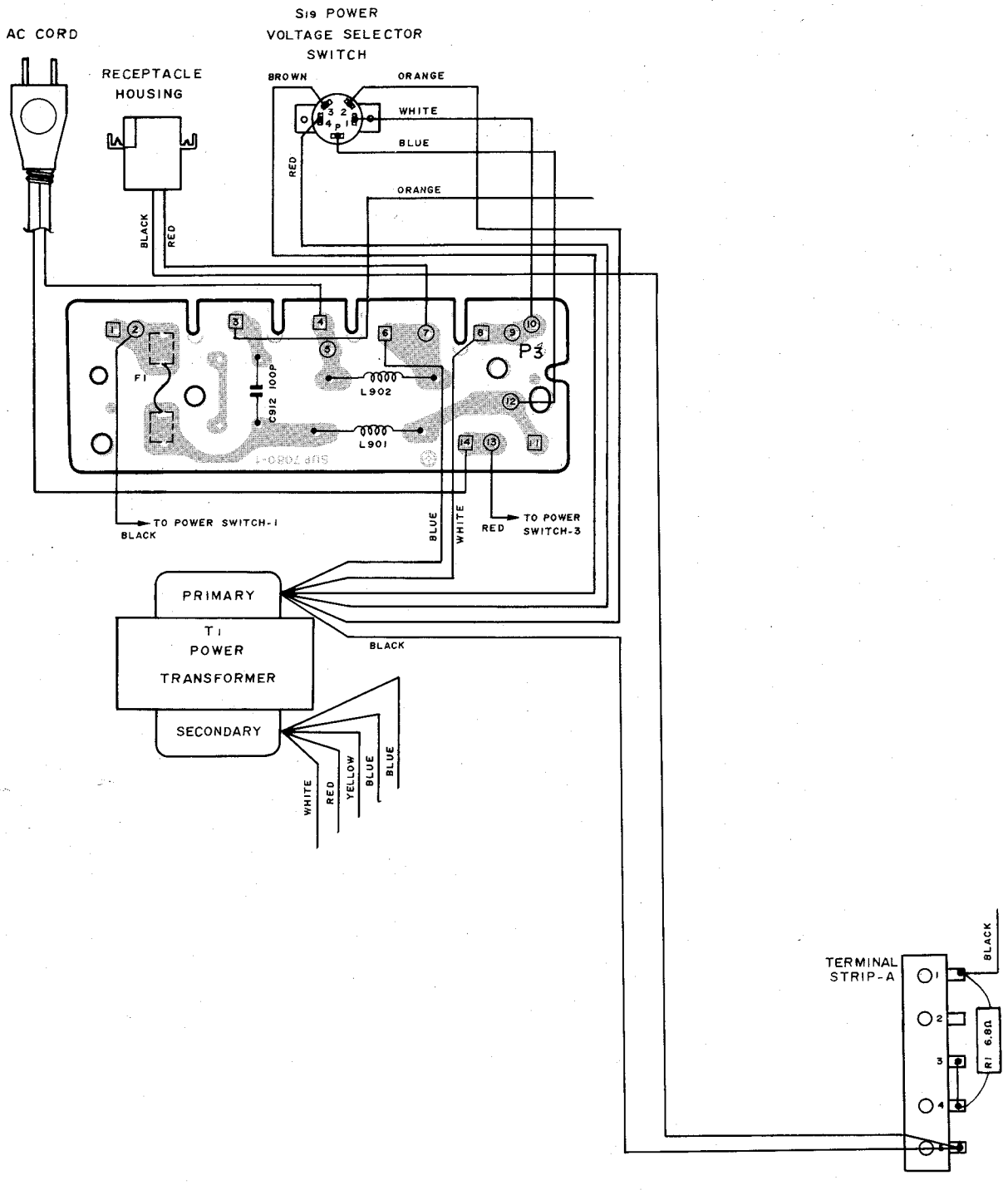
P1

IAGRAM

NEW



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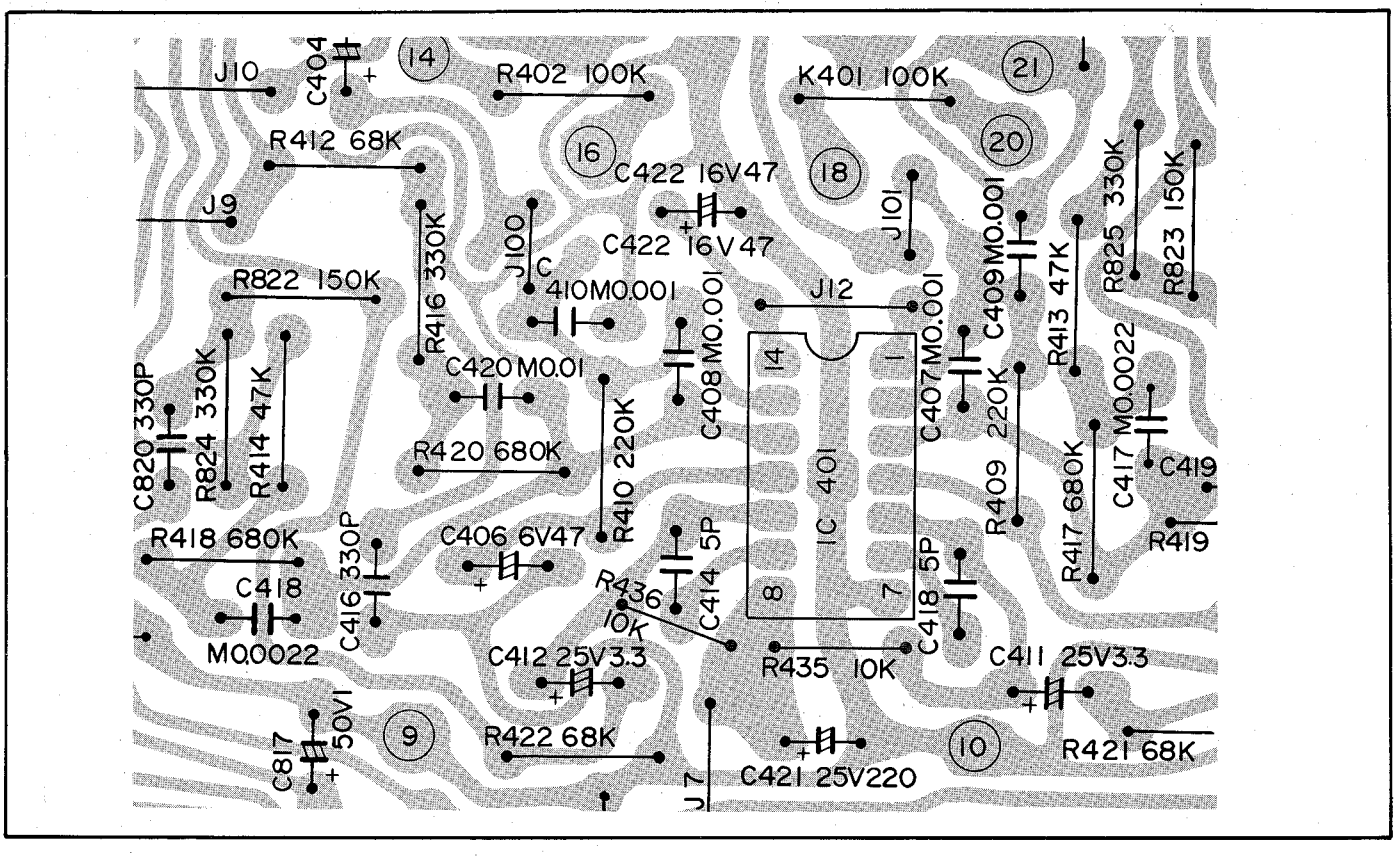
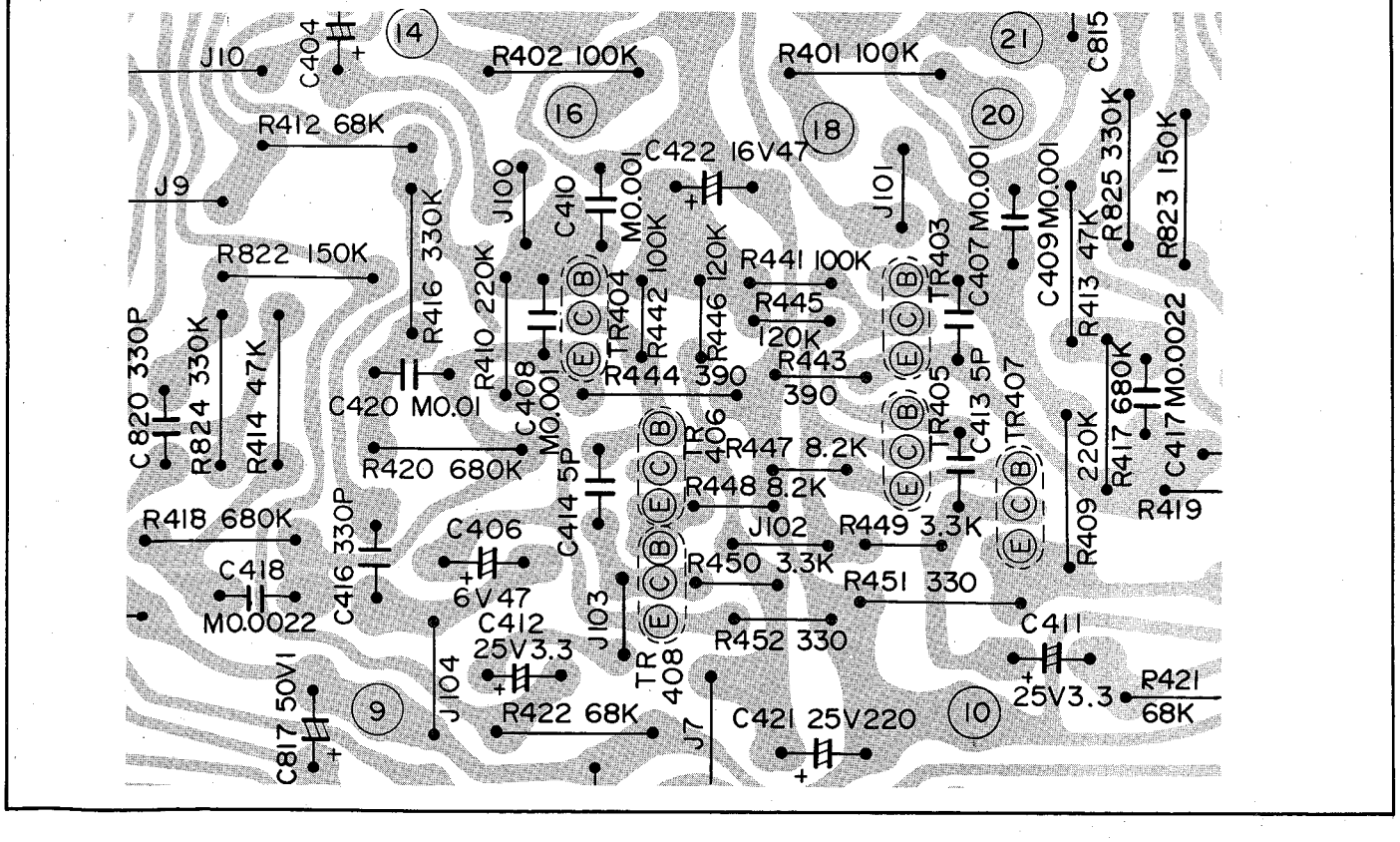
WIRING DIAGRAM
(8-TRACK PLAYER/RECORDER)

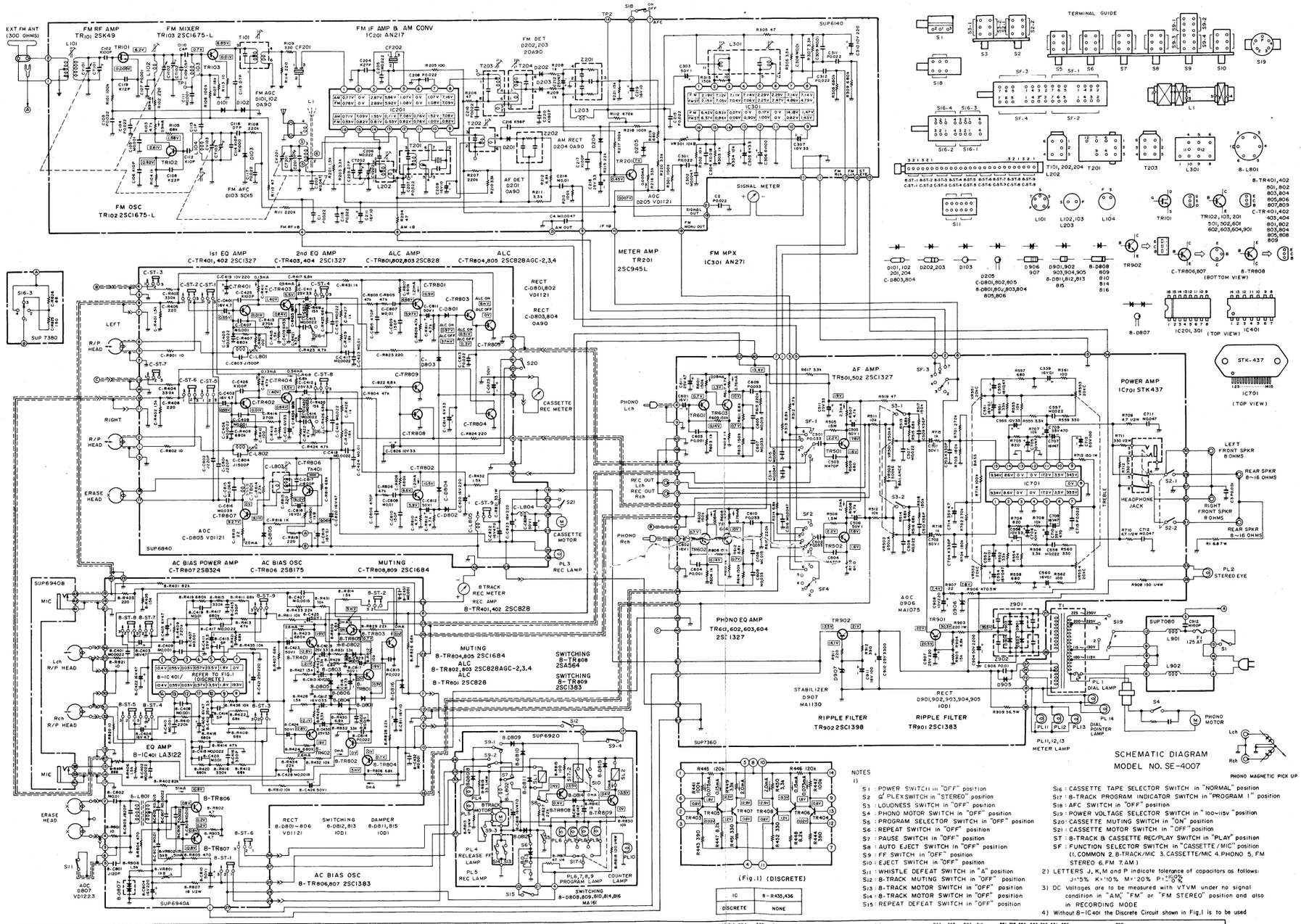
ORIGINAL S/M



NE



SCHEMATIC DIAGRAM



IC	8-R435,436
DISCRETE	NONE

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